

Original Charter Application

ACADEMY OF AMERICA

20755 Greenfield Rd. • Suite 300 • Southfield, MI 48075 • (248) 569-7787 • fax: (248) 569-6674

March 10, 2000

Nancy J. Wilson, Ph.D.
Associate Secretary of Education
Delaware Department of Education
P.O. Box 1402
Dover, Delaware 19903-1402

Dear Dr. Wilson:

Per your letter dated February 24, 2000, attached is our revised application, submitted March 13, 2000. Ten bound copies printed back to back are attached.

Included in the revised application are the names and addresses of four members of the board of directors and we are currently seeking a fifth member of the board of director from within the local community. This fifth member will be identified and submitted to you prior to the public hearing which is set for April 12, 2000.

If you have any questions or concerns regarding the attachments please feel free to call (248) 569-7787.

Sincerely,

A handwritten signature in black ink, appearing to read 'A. L. Burks', written over a horizontal line.

Andrew L. Burks
Vice President / CFO

The Cover Page

The Narrative

DELAWARE DEPARTMENT OF EDUCATION

CHARTER SCHOOL APPLICATION FORM FOR

A NEW SCHOOL TO BE OPENED

IN SEPTEMBER 2001

Academy of Dover Charter School
Name of Proposed School

Wilhelmina S. Hall, Ed. D.
Name of Contact Person

Ruby Coppadge
Name of the Head of the Board

20755 Greenfield Road, Suite 300
Southfield, MI 48075
Mailing Address of Contact Person

August 2001
Opening Date

(248) 569-7787
Telephone Number of Contact Person

K through 8
Grades for School

(248) 569-6674
Fax Number of Contact Person

First Year Enrollment

400

K through 6

Number

First Year Grade Span

Second Year Enrollment

500

K through 7

Number

Second Year Grade Span

Third Year Enrollment

700

K through 8

Number

Third Year Grade Span

Note: If this application is approved by the Department of Education and State Board of Education, with or without amendment, the final approval application and any amendments will serve as the approved charter for the school. A charter cannot be altered without the approval of the Secretary of Education.

Document No: 95-01/00/07/01

1. Executive Summary

The vision of the Academy of Dover is to provide all students with mastery of the essential skills needed for a quality education in the 21st Century. We believe that all students can and will achieve the level of academic performance necessary to ensure successful educational outcomes.

A. Grades to be served

The Academy will be open for the admission of students in kindergarten through grade six, who have expressed interest in and commitment to the Academy's curriculum and methods of teaching. An additional grade will be added each subsequent year. Students will be residents of the State of Delaware.

B. Target population

There are approximately 6400 school age children and 23% African Americans in this geographical area. It is anticipated that the majority of student population to be served will be majority African Americans. However, the Academy will comply with all civil rights laws, give all students equal access and operate in a non-discriminatory manner with regard to admissions.

C. School size

The Academy will open year one with 400 students, K-6. One additional grade will be added through year three (K-7, K-8).

D. Location

The school will be located in the Dover / Kent County School District.

E. Founding group

The founding group shared a common goal of improving the academic performance of Urban American children in a non-traditional setting and a non-traditional curriculum. This group from the community, in which the Academy will be located, has collaborated with experienced charter school personnel from the Academy of America to assist in operationalizing the vision of a charter school that emphasizes entrepreneurship and business. The Academy of America (a 501 © (3)) was selected because it has more than thirty years of successful experience in operating schools.

F. School focus

The Academy has developed an Entrepreneurial Curriculum that is grade appropriate and aligned with Delaware's core curriculum process. The Core Curriculum will be delivered using a business and technology thematic approach. Each subject will integrate entrepreneurial and business principles and the possible career, business and job opportunities available in the field. The content focus will be on skills necessary to accomplish the standards.

G. Parental Involvement

The academy believes that a joint and coordinated effort by parents and teachers is essential to deal successfully with problems of discipline, motivation, and the development of good work habits at home and in school. We have identified the parent involvement program at the Academy to include the four basic roles as defined by Williams and Stallworth, (1983/84). The four basic roles are: Parents as Partners; Parents as Collaborators and Problem Solvers; Parents as Audience; and Parents as Supporters. In addition, the Academy will adopt the Parent Declaration of Responsibility to increase parental involvement.

2. Statement of Need

a. Why is there a need for this type of school?

There is a need to respond to community demand for more options for educating children. The charter school is viewed as an answer to the demand for an alternative to the traditional public school. The charter school will provide families with a greater opportunity for choice and greater participation in the call for accountability for results.

b. Why is the charter school model an appropriate vehicle to address this need?

The charter school model is viewed as giving greater opportunities for improving education, more community involvement, raising the bar for expected results and creating a competitive atmosphere that may spur traditional public schools to do better or become more open to change.

c. How will this charter improve public education in Delaware? What will be the school's key strategies for improving student performance? If the strategies are successful, are there barriers to the use of those strategies in non-charter public schools throughout the state?

This charter will provide the State of Delaware an additional choice for those parents who are seeking new and innovative ways of educating their children. The key strategy for improving student performance will be in our Entrepreneurial Curriculum, which includes cooperative learning and hands-on experiences. It allows students to explore career job opportunities at an early age and is aligned with the Delaware service learning program. There are no barriers to the non-charter schools use of the model.

d. How will the educational practices used in this charter school be shared with other Delaware educators?

The educational practices will be shared through professional development and open visitation for all interested educators.

Qualifications of the Applicant

3. Identify the group seeking the charter

a. Identify the names, the places of residence, and the phone numbers of the founding Board of Directors and indicate which members are teachers certified in Delaware, parents, and community.

The founding Board of Directors is listed below:

Alisa Armstead
218 North Queen
Dover, Delaware 19904
(302) 678-0218

Ruby Coppadge (Certified Teacher, Certificate Attached)
943 Jawd Drive
Dover, DE 19901

Jana Yancy
452 Fulton
Dover, De 19901
(302) 736-0687

The head of the Board, Ruby Coppadge has lived in Delaware more for than 25 years. Other founding board members have each resided in the metropolitan - Dover area for more than five years. These individual experiences, employment relationships, church and social affiliations have provided an understanding of the needs, strengths and potential growth of the community. These board members have a vested interest in the community having served as business manager, entrepreneur, parent and community leaders/participants.

The broad based background of the board members and their many contacts in the community prompted them to establish a charter school. The board members' vision regarding the education of Urban American children with an Entrepreneurial Curriculum appears to be representative of a large segment of that community.

b. Describe how the group came together and if there are any partnership arrangements with existing schools, educational programs, businesses, non-profit organizations, or any other entities or groups. If any consultants or contractors were enlisted to help prepare this application, please name them, describe their qualifications, and indicate the areas where they provided information and assistance.

The founding group shared a common goal of improving the academic performance of

Urban American children in a non-traditional setting with a non-traditional curriculum. This group from the community, in which the Academy will be located, has collaborated with experienced charter school personnel from the Academy of America to assist in operationalizing the vision of a charter school that emphasizes entrepreneurship and business. The Academy of America (a 501 © (3)) was selected because it has more than thirty years of successful experience in operating schools.

Previous experiences of the Academy of America have shown that local residents do not have the expertise or resources for preparing applications and starting up new schools. Therefore, two staff members (Wilhelmina Hall, and Andrew Burks) assisted with the application process. Wilhelmina Hall, Ed.D. has more than thirty years of experience as teacher, Principal and Project Director. Andrew Burks is an experienced Public Accountant with an MBA. These individuals provided assistance throughout the initial planning and application process.

c. Describe the plans for further recruitment of board members of the school, especially teachers employed at the school and parents of students enrolled at the school.

The initial Board of Directors of the Academy will establish an Advisory Board within the first year of operation of the Academy. The Advisory Board members will consist of parents, teachers and community representatives. During the second year of the operation of the Academy, the Advisory Board will select a representative from its membership to serve on the Board of Directors.

Certificate of Certification

Code No. B11-S102-T 1

**Department of Education
State of Delaware**

Know all persons by these Presents, that

RUBY COPPADGE (528-36-9117)

having fulfilled the requirements of the rules and regulations
of the State Board of Education
for the certification of Professional School Personnel is hereby granted this

PROFESSIONAL STATUS CERTIFICATE RENEWAL

and is licensed to hold the position of

ELEMENTARY TEACHER 1-8

in the State of Delaware for the period of 5 years
unless this Certificate be sooner revoked.



Given at Dover: February 5, 1998
Effective Date: July 1, 1995
Expiration Date: June 30, 2000

Secretary of Education

Documentation of Incorporation

4. Identify the name of the corporation, date of incorporation, and name of the corporation's chief operating officer. Attach a certified copy of the Certificate of Incorporation and the bylaws of the corporation. The by-laws must be consistent with the provisions of the Freedom of Information Act, Del. C., Title 29, Chapter 100 (related to public bodies, public records, and open meetings) and provide for representation of the school's teachers and parents of students on the board of directors.

Documentation of Incorporation

4. Identify the name of the corporation, date of incorporation, and name of the corporation's chief operating officer. Attach a certified copy of the Certificate of Incorporation and the bylaws of the corporation. The by-laws must be consistent with the provisions of the Freedom of Information Act, Del. C., Title 29, Chapter 100 (related to public bodies, public records, and open meetings) and provide for representation of the school's teachers and parents of students on the board of directors.

The Academy currently has incorporated in the state of Delaware. The name of the Corporation is Academy of Dover, Inc., the date of the incorporation is February 25, 2000. Attached is a copy of the certificate of corporation and the by-laws of the corporation. The by-laws are consistent with the provisions of the Freedom of Information Act, DEL. C., Title 29, Chapter 100, and will provide for representation of the schools teachers and parents of students on the Board of Directors.

Mission and Purpose of the School

5. Describe the purpose, mission, goals, and core philosophy of the proposed school.

The vision of the Academy of Dover hereafter referred to as the "Academy" is to provide all students with mastery of the essential skills needed for a quality education in the 21st Century. We believe that all students can and will achieve the level of academic performance necessary to ensure successful educational outcomes. The Academy is committed to preparing all students to be successful citizens, cooperative workers and profitable entrepreneurs as they develop their unique potential. Currently, to our knowledge, a school with an entrepreneurial focus and thrust is not available for students and parents in or near the Dover community.

We promise that through the collaborative efforts of parents, administrators, teachers and stakeholders, a learning environment will be provided that has a culturally diverse curriculum of educational excellence that will facilitate high levels of performance among students

Educational Program

6. Describe the school's educational plan including the following:

a. Scope and sequence of the curriculum

The Academy's Curriculum content is aligned with Delaware Standards and includes objectives and methodologies unique to the mission and goals. The Academy will incorporate this curriculum in grades K-6. Grade levels will expand through grade eight in three years. The curriculum will include instruction in Language Arts/English, Mathematics, Science and Social Studies.

b. Provide evidence of the school's curriculum aligning with the state's content standards and state performance indicators (or comparable alternative indicators). Indicate how the instructional strategies are consistent with the school's curriculum.

There are three reasons for aligning the Delaware's Department of Education Standards with the Academy's Curriculum. First of all, an alignment of the curriculum assures academic success for all K-6 students in all subjects. Secondly, it provides a foundation for teachers to know what every student should know and learn at each grade level. Last of all, it prepares students for mastery of the state assessment test.

A review of the Delaware Standards and Performance Indicators indicate that the Academy's core curriculum is closely aligned. The core curriculum includes the same major subject content (Language Arts/English, Mathematics, Science and Social Studies). The Academy will adjust to meet other standards. (See Appendix A for school's curriculum alignment)

As you view the sample alignment located in Appendix A, first of all, you will see a Standard (a description of what students should know and be able to do in a given content area). In the sample, the Academy's Mathematics Standard #1 is aligned with Delaware's Mathematics Standard M5. Next, to support this standard, the Academy's Mathematics Benchmark (a statement which indicates what students should know and be able to do at various developmental levels i.e., K-2, 3-5, and 6-8) #1 has been aligned with Delaware's Performance Indicator M5.40. Finally the Academy's Performance Objectives have been included for each benchmark to show how students will demonstrate mastery of the standard at each developmental level.

The Curriculum will be delivered using a business and technology thematic approach. Each subject will integrate entrepreneurial and business principles and the possible career, business and job opportunities available in the field. This thematic approach will be integrated into the foundation and enrichment skills as students work to accomplish the academic performance necessary to achieve successful educational outcomes and the essential skills needed for a quality education in the 21st Century.

c. Describe how the curriculum approaches are consistent with the assessment strategies that will be used.

The curriculum content is consistent with and covers the standards that will be assessed. It covers both informational and narrative text in reading, the writing process, mathematics concepts based on National Standards, demonstration of science knowledge and demonstration of social studies concepts.

d. What teaching methods will be used? How will this pedagogy enhance student learning?

The Academy's delivery of instructional methods will incorporate methods to accommodate the learning styles of all students. The staff will be trained in an instructional methodology that meets the needs of all students. Instruction will be student centered, focusing on cooperative learning, critical thinking skills, using technology, appealing to the multiple intelligence and using the community as a learning environment. The method of delivery will use the "Active Learning" approach of learning while doing.

This method will enhance student learning by providing an atmosphere that is student centered and allow them more participation in the learning process.

e. Describe how the educational program will address students with IEPs and/or accommodation plans.

The educational program is inclusive of all students and the Academy will comply with all laws related to students with accommodations. The student will receive the necessary services necessary from a certified teacher to accomplish the IEP goals and objectives.

f. Describe the school calendar and hours of operation. Provide the calendar for the first year of school operation.

The Academy and the State of Delaware will require all students to attend school 185 days and that teachers be available for work 195 days per school year. The school day for students will begin at 8:15 am and end at 3:00 p.m. Teachers will remain until 4:00 p.m. for planning, tutoring and for professional development.

**Academy of Dover Calendar
For the 2001-2002 School Year
*Tentative***

August 13, 2001 (Monday).....	School Office opens for Registration
August 28, 29, 30, 2001 (Tuesday-Thursday)	Teachers Report to Work
September 3, 2001 (Monday)	Labor Day Observance No school for Teachers and Students
September 4, 2001 (Tuesday).....	First day of school for students
October 8-19, 2001 (Monday-Friday).....	Stanford 9
October 19, 2001 (Friday)	Classes in session 8:30am- 11:30am
October 26, 2001 (Friday)	End of First Card Marking
November 1, 2001 (Thursday).....	Parent/Teacher Conference – 3:30pm – 8:00pm Report Cards Issued
November 2, 2001 (Friday)	Classes in session 8:30am-11:30am No PM school for teachers and students
November 7-12 (Wednesday-Monday).....	DSTP Fall Testing
November 22-23 (Thursday-Friday)	Thanksgiving Observance No school for teachers and students
December 5, 2001 (Wednesday)	Classes in session 8:30am-11:30am No PM school for students PM – Professional Development
December 24,2001-January 1, 2002.....	Holiday Recess No school for teachers and Students
January 2, 2002 (Wednesday).....	School reopens classes resume
January 18, 2002 (Friday)	End of Second Card Marking
January 21, 2002 (Monday).....	Martin Luther King, Jr. Day
January 22, 2002 (Tuesday).....	Second semester begins
January 24, 2002 (Thursday)	Parent/Teacher Conference 3:30pm – 8:00pm Report Cards Issued

January 25, 2002 (Friday).....	Classes in session 8:30am – 11:30am No PM school for teachers and students
February 21-22, 2002 (Thursday-Friday)	Winter Break No school for teachers and students
March 6, 2002 (Wednesday)	Classes in session 8:30am - 11:30am. No PM school for students PM-Professional Development
March 11-15, 2002 (Monday – Friday).....	Stanford 9
March 22, 2002 (Friday)	End of Third Card Marking Parent/Teacher Conference 3:30pm – 8:00pm Report Cards Issued
March 25-29, 2002 (Monday-Friday)	Spring Recess No school for teachers and students
April 1, 2002 (Monday).....	School reopens classes resume
April 1-5, 2002(Monday-Friday).....	DSTP Spring Testing
May 7, 2002 (Tuesday)	Classes in session 8:30am – 11:30am No PM school for teachers and students
May 27, 2002 (Monday).....	Memorial Day Observance No school for teachers and students
May 28, 2002 (Tuesday).....	School reopens, classes resume
June 14, 2002 (Friday)	Last day of school, report cards issued No PM School for students 12:00pm - 3:00pm Teachers in Session

g. Describe any other features of the school's educational plan (including special materials or focus on technology) which will aid the reviewers in understanding the unique nature of the school.

The Academy will be set up using a "Family/House" concept. Placement will be determined by a Student Assessment Team. This team will consider the student population, age of students, number of students, past history, reason for placement, student strengths and weaknesses, student interests and recommendation of the team..

This process will create a learning community of students with various ethnicity's' abilities, genders, interests and age levels.

Each "House" will be led by a team of teachers thereby facilitating a more personalized relationship with their students. The "House" organizational plan will facilitate teachers developing and delivering more individualized instruction. The goal is to create a "Family Atmosphere" where the adult guides, nurtures, leads and teaches. Some benefits include: team teaching which allow common planning, improved staff relationships, improved sense of community and family, improved parent relationships, long term planning for student achievement and development and implementation of programs to benefit smaller groups.

Measurable Student Performance Objectives

7. What are the specific performance objectives for students and what tools will be used to measure whether students meet or exceed those objectives? For example:

List the school's academic objectives for student learning for the initial three-year charter period and their relationship to the content standards set by the State Board of Education. Indicate the specific measurable performance targets on each objective for each of the initial three years of the charter. For guidance in this area, applicants may request a copy of a recently negotiated performance agreement from the Charter School Office.

The Delaware Student Testing Program (DSTP) will be used in grade 3 and 5 for reading, mathematics and writing, and in grades 4 and 6 for science and social studies. The plan listed below indicates the projected percentage points of students who will exceed the state standard.

The Stanford 9 test will be given in grades 1-6 in the fall as a pre-test and again in the spring as a post-test. This test will be used each school year as the primary assessment instrument for measuring the percentage of students success at the appropriate grades in each subject area.

a. The following educational goals reflect the academic achievement for each grade and are important to the mission of the academy.

1.1 Reading: Delaware Student Testing Program (DSTP)

By 2003-2004, the percent of students in grades 3 and 4 who meet or exceed the standard for Delaware Student Testing Program will increase 21 percentage points.

Year	2001-2001	2002-2003	2003-2004
Rate of Increase	+3 percentage points	+ 6 percentage points	+21 percentage points

(Note:) The Delaware Student Testing Program (DSTP) in reading, will be given at the Academy for the first time in 2001-2002. When the 2002-2003 results become available, which show the change between 2001-2002 and 2002-2003, annual goals will be prepared for students in each grade based on the data.

1.2 Mathematics: Delaware Student Testing Program (DSTP)

By 2003-2004, the percent of students in grades 3 and 4 who meet or exceed the standard for Delaware Student Testing Program will increase 21 percentage points.

Year	2001-2001	2002-2003	2003-2004
Rate of Increase	+3 percentage points	+ 6 percentage points	+21 percentage points

(Note:) The Delaware Student Testing Program (DSTP) in mathematics, will be given at the Academy for the first time in 2001-2002. When the 2002-2003 results become available, which show the change between 2001-2002 and 2002-2003, annual goals will be prepared for students in each grade based on the data.

1.3 Science: Delaware Student Testing Program (DSTP)

By 2003-2004, the percent of students in grades 4 and 6 who meet or exceed the standard for Delaware Student Testing Program will increase 21 percentage points.

Year	2001-2001	2002-2003	2003-2004
Rate of Increase	+3 percentage points	+ 6 percentage points	+21 percentage points

(Note:) The Delaware Student Testing Program (DSTP) in science, will be given at the Academy for the first time in 2001-2002. When the 2002-2003 results become available, which show the change between 2001-2002 and 2002-2003, annual goals will be prepared for students in each grade based on the data.

1.4 Writing: Delaware Student Testing Program (DSTP)

By 2003-2004, the percent of students in grades 3 and 4 who meet or exceed the standard for Delaware Student Testing Program will increase 21 percentage points.

Year	2001-2001	2002-2003	2003-2004
Rate of Increase	+3 percentage points	+ 6 percentage points	+21 percentage points

(Note:) The Delaware Student Testing Program (DSTP) in writing, will be given at the Academy for the first time in 2001-2002. When the 2002-2003 results become available, which show the change between 2001-2002 and 2002-2003, annual goals will be prepared for students in each grade based on the data.

1.5 Social Studies: Delaware Student Testing Program (DSTP)

By 2003-2004, the percent of students in grades 3 and 4 who meet or exceed the standard for Delaware Student Testing Program will increase 21 percentage points.

Year	2001-2001	2002-2003	2003-2004
Rate of Increase	+3 percentage points	+ 6 percentage points	+21 percentage points

(Note:) The Delaware Student Testing Program (DSTP) in social studies, will be given at the Academy for the first time in 2001-2002. When the 2002-2003 results become available, which show the change between 2001-2002 and 2002-2003, annual goals will be prepared for students in each grade based on the data.

1.6 Reading: Stanford 9

By 2003 - 2004, increase to 50 percent of students who attain **Stanford 9** scores at or above national norms in reading.

Note: The **Stanford 9** in reading will be given at the Academy for the first time in the fall and spring of 2001-2002. When the spring, 2001-2002 results become available, which show the change between fall, 2001-2002 and spring, 2001-2002, annual goals will be prepared based on attaining the national norm of fifty percent in 2003-2004.

1.7 Mathematics: Stanford 9

By 2003 - 2004, increase to 50 percent of students who attain **Stanford 9** scores at or above national norms in Mathematics.

Note: The **Stanford 9** in mathematics will be given at the Academy for the first time in the fall and spring of 2001-2002. When the spring, 2001-2002 results become available, which show the change between fall, 2001-2002 and spring, 2001-2002, annual goals will be prepared based on attaining the national norm of fifty percent in 2003-2004.

1.8 Science: Stanford 9

By 2003 - 2004, increase to 50 percent of students who attain **Stanford 9** scores at or above national norms in science.

Note: The **Stanford 9** in science will be given at the Academy for the first time in the fall and spring of 2001-2002. When the spring, 2001-2002 results become available, which show the change between fall, 2001-2002 and spring, 2001-2002, annual goals will be prepared based on attaining the national norm of fifty percent in 2003-2004.

1.9 Foreign Language Education

By 2003 - 2004, increase to 100 percent of students in grades K-6 enrolled in foreign language classes.

Note: During 2001-2002 baseline data are being established for the percent of students in grades K-6 enrolled in foreign language classes. An objective will be prepared for 2003-2004 based on the data. During subsequent years, baseline data will be established on the competence of students in foreign language and this information will be incorporated into the goal.

1.10 Technology

By 2003 - 2004, increase to 100 percent of students in grades K-6 enrolled in technology classes.

1.11 Student Attendance

By 2003 - 2004, increase to 95 percent or higher students' daily attendance.

1.12 Student Retention Rate

By 2003 - 2004, increase to 90 percent of students who re-enrolled at the Academy from the previous year.

Note: The retention rate is based on the number of students returning to the Academy. The school goal reports on the retention rate will provide a comparison of the annual re-enrolled students from the previous year.

1.13 Professional Development

By 2003 - 2004, increase to 95 percent the quality of professional development.

Note: During 2001-2002 baseline data will be established on the quality of professional development, and a goal will be prepared for 2003-2004 based on the data. Professional development will be based on identified staff needs. The school goal reports on the quality of professional development will include data on quality.

1.14 Staff Attendance

By 2003 - 2004, increase to 95 percent staff daily attendance.

Note: During 2000-2001 baseline data will be established on the quality of staff attendance, and a goal will be prepared for 2003-2004 based on the data.

1.15 Parent Satisfaction

By 2003 - 2004, increase to 85 the percent of parents of the Academy's students who rate the School as satisfactory.

Note: During 2001-2002 baseline data will be established on the quality of parent satisfaction, and a goal will be prepared for 2003-2004 based on the data. Parent satisfaction will be based on written surveys and the retention rate of returning students.

1.16 Volunteers

By 2003 - 2004, increase to 85 percent the quality of the Academy's volunteer program.

Note: During 2000-2001 baseline data will be established on the quality of the volunteer program and a goal will be prepared for 2003-2004 based on the data.

b. Describe the assessment tools that will be used including state assessments and other standardized or performance assessments that may be used. On what timetable will they be used? If relevant, how will these be developed?

The Delaware Student Testing Program (DSTP) will be used in the spring and fall of each school year as the primary assessment instrument for measuring the percentage of student success at the appropriate grades in each subject assesses. The Stanford 9 will be used as a pre-post test to determine achievement growth during the school year for **all** grades.

In addition, assessment will be done through authentic assessment, observations, teacher made test, Portfolios and real life applications of concepts learned. The Delaware State Assessment will be a major tool used to determine the success. Additional accountability will be assessed through the following evaluation tools:

- Report Cards/Grades
- Student Portfolios
- Subject Area Evaluation
- Teacher Created Tests
- Project Based Evaluations
- Pre-Post Testing/Assessment
- Student Self-Evaluation
- Individualized Student Learning Plan Progress Reports
- Student Assessment Team: Student Status Reports

c. How will student evaluation information be used to improve student performance?

Student evaluation information will be reviewed by the School Improvement Team and all staff. Once the information is analyzed the team and staff will use it to plan professional development for teachers, to realign curriculum, adjust lesson plans and develop Individual Plans for students. In addition, the remediation program objectives will be geared to these needs.

d. What actions will be taken when students do not meet performance expectations?

When students do not meet performance expectations an Individual Plan will be written for their weaknesses; tutoring, mentoring and redemption classes will be provided.

e. How will the school meet the school accountability requirements of the Delaware Accountability Act of 1998?

The Academy goals and objectives are very closely aligned with the State of Delaware Standards. Therefore, the Academy will provide programs such as mentoring , after school programs and the Individualized Plan to reduce the number of students failing. Students will not receive social promotion. They will be tested to determine their weaknesses and prescriptions will be written to improve their achievement.

Admission Policies and Procedures

8. What is the plan (including timetable) to be used for recruiting students? How will the school publicize its program and admission procedures? How will the school ensure fairness in recruitment and admission of students? How will the school recruit a sufficient number of students to be financially viable?

Upon notification from the Delaware Charter Panel that the final charter has been granted, the Academy will prepare the printed brochures, fliers, and leaflets. In addition, we will prepare newspaper and radio ads and proceed to publicize the opening of the Academy.

The availability of applications for admission to specific grade levels will be made public beginning the first week after the final charter is granted.

The availability of applications for admission to specific grade levels will be made public for a minimum of eight weeks per year. Notification of application and enrollment dates will be published in a local daily or weekly newspaper. Students must complete and return an application within the specified time period.

No student will be discriminated against on the basis of intellect, athletic ability, measures of achievement or aptitude, status as a handicapped person, religion, creed, race, sex, color, national origin and or other basis that would be illegal if used by a public school district.

9. What is the plan for selecting students if more students seek admission than space allows?

All State and Federal law applicable to public schools concerning church-state and civil issues will be complied with for a random student selection process

If more applications are received than openings are available in the various grade levels being offered each semester, a lottery will be held and applications will be randomly selected for orientation and admission.

After a student has been enrolled at the Academy, he/she will be permitted to enroll in succeeding school years as long as: (1) appropriate grade levels are offered at the Academy, (2) the student and parents express a continued interest in the curriculum offered; and (3) he/she reapplies during open registration periods.

If openings remain after the official enrollment period, students will be admitted on a first-come, first-serve basis throughout the school year. If openings do not exist for the desired grade levels at the official enrollment period, applicants will be placed on a waiting list. When openings occur, students will be placed from the waiting list on a first-come, first-serve basis.

10. State law prohibits charter schools from restricting admissions except for a limited number of circumstances that are specifically permitted by Del. C., Title 14, Section 506(3). Which, if any, preferences authorized by this statute does the school propose to use? If more than one preference will be used, describe how the various preferences will be employed.

The Academy will comply with all state laws on admission. Therefore, we will restrict only admissions authorized by statute.

11. How will the school accommodate at-risk and special education students? What is the plan for ensuring that the school will be in full compliance with current IDEA law as revised in 1997, including but not limited to: evaluation, re-evaluation, accommodations, and having certified special education teachers prior to the admission of students.

Accommodations for At-Risk Students:

It is our goal and we will work toward that end, that all students reach the stated performance standards. However, recognizing that a significant percentage of the student population will be students at risk of academic failure, the Academy will include strategies dealing with this population.

It will include the following components::

High expectations for all students: Students will be involved in extra class periods for review and extended day schooling.

Appropriate assessment: Implement an assessment program to evaluate student achievement on an ongoing basis's. A process of monitoring will be implemented in order to re-teach skills not mastered

Tutoring: Peer or cross-aged tutoring will be used to give students the chance to help each other, benefiting both high and low achievers.

Teacher participation in planning: Teachers will be involved in devising the school's new mission to try innovative and "hands-on" ideas.

Professional development: This component will begin with a review of "high expectations" teaching strategies; one or more teachers will be designated as Lead-teachers to assist other teachers in incorporating new techniques into their classroom.

Accommodations for Special Education Students:

Students with disabilities attending the Academy will receive services in accordance with the individualized education program (IEP) recommended by the committee or subcommittee on special education of the school district of residence. The Academy will provide such services directly, by contract with another provider, or arrange to have such services provided by the school district of residence. The following will be implemented in compliance with the Individuals with Disabilities Act of 1997:

The Academy will honor incoming student's IEP. The school will determine how it can meet the student's needs, using its own approach to teaching and learning. If the school offers to all students the kinds of services required in the IEP (for example, personalized instructions), the incoming student may require fewer hours of specialized services. It may be permissible to reclassify the student, or to exit the student from the IEP, However, the Academy will obtain parental permission before changing the IEP.

The Academy will review student enrollments as soon as possible to determine how many students will require special education services and at what levels. The staff will inquire from the sending school if there is an IEP on file so that they can begin immediately the 30-day period of review.

The Academy will use the Special Education Process, which includes but is not limited to the eight-step process and the forms provided to comply with these rules, Face Appropriate Public Education (FAPE) and related services.

The following eight steps will comprise the process for student identification for special education:

1. Child Find and Identification
2. Initial Evaluation and Eligibility Determination
3. IEP Development
4. Initial Placement
5. IEP Implementation in the least restrictive environment
6. Review and Revision of IEP
7. Re-evaluation and Determination of Eligibility
8. Repeat Step 6 or Dismiss from Special Education

Child Identification

The Individuals with Disabilities Education Act of 1997 (IDEA '97) requires all individuals with disabilities, aged 3 through 21, in public and private, (including religiously-affiliated) elementary and secondary schools, who are in need of special education and related services, be identified, evaluated, and served. The Academy will identify, evaluate, and provide services to enrolled eligible children in the age ranges Kindergarten through grade 6.

*use of IEP
Parents
primary
process
discovery
modification*

Evaluation

A multidisciplinary evaluation team (MET) will conduct a comprehensive evaluation. The MET will make recommendations to the IEPC regarding the student's eligibility to receive special education programs and services. No single procedure shall be used as the sole criterion for determining an appropriate educational program for a person. The MET recommendation is based on the eligibility requirements outlined in the Federal and State Laws.

The multidisciplinary evaluation team (MET) will submit a written report to the IEPC, which will include the student's current level of educational performance and unique educational needs, in order to determine the appropriate educational program. Parents have the right to submit evaluations that may assist the IEPC in educational planning for their children.

Individual Education Plans

The following steps will be implemented in developing the Individual's Educational Plan:

Referral, Parent Notification, Parent Consent Received, Multidisciplinary Evaluation Team (MET), Individualized Educational Planning Committee (IEPC) Meeting, Parent Notification, IEPC Implemented, Annual Review and Three Year Re-Evaluation

Procedural Safeguards

A Procedural Safeguards notice will be provided to parents at the initial referral for evaluation, at each notification of an IEP meeting, at each re-evaluation or when the parent requests due process. The contents of the Procedural Safeguards will include an explanation of all parent rights and responsibilities pursuant to the Special Education Rights of Parents and Children under the Individuals with Disabilities Education Act (IDEA). (Amended 1998) (See appendix B for appropriate forms)

Due Process Hearing

Upon request by the parent, a due process hearing will be conducted to resolve disputes or disagreements between parties regarding the identification, evaluation, or placement of an individual.

The due process hearing will be conducted in accordance with the requirements of applicable federal and state laws, pursuant to the Federal Regulations for IDEA '97.

Least Restrictive Environment

Pursuant with the Special Education Law (IDEA '97) services to students will be delivered in the least restrictive appropriate environment, meaning the students will be placed in settings which are closed to the regular education program in which they can progress effectively with or without added support and resources.

Certified Special Education Teachers and Related Personnel

Qualifications for professional and paraprofessional staff shall be consistent with Delaware Rules and Regulations. The Academy will contract services for school Psychologists, school Social Workers, and other personnel who meet the required regulations.

Screening Forms

The following forms will be used for screening and referral documentation: Screening Report Form, Referral for Evaluation Form, Parent Consent Form, Eligibility Determination Form, Meeting Notice Form, Prior Written Notice Form, IEP Form, Review of Progress Form, Review of Existing Evaluation Data Form, and the MET Report Form.

Treatment of Student Records

The Academy shall comply with the treatment of special education student records pursuant with all procedures and guidelines documented in the Federal Regulations for IDEA '97. This will include, but is not limited to, the headings that follow:

Access rights, Record of access, Records on more than 1 person, List of types and locations of education records, Fees, Amendment of records at parent's request, Opportunity for a hearing to challenge record, Hearing Procedures, Hearing results in finding of violations, Finding of no violation, Parental consent for disclosure of personally identifiable information, Confidentiality safeguards and Destruction of information.

Referral Process

INCOMPLETE

Any number of different people may refer a student suspected of having a disability. Referrals may be made by teachers, social workers, parents, licensed physicians, registered nurses, or representatives of other related agencies.

The Individuals with Disabilities Education Act (IDEA) identifies certain categories under which a student would be eligible for services. These disabilities are defined as; severely mentally impaired, visually and hearing impaired, physically, otherwise health impaired, speech and language impaired, learning disabled, and preprimary impaired.

When a referral is received, the Academy will notify parent/guardian/surrogates in writing and request written consent to conduct an evaluation.

Parental Consent

The Academy will follow the procedure mandated by the State of Delaware as it relates to parental consent for initial evaluation, contents of notice and refusal to consent or respond. It will include, but not be limited to the following procedure:

Within ten (10) calendar days of receipt of a referral of a person suspected handicapped, and prior to any formal evaluation designed to determine eligibility for special education programs and services, the public agency shall notify the parent.

Accommodations for Limited English Proficient (LEP) Students:

The following procedures will be implemented for Limited English Proficient Students:

- The Academy will insert questions on the registration form (e.g. "Is a language other than English spoken at home?") at the initial enrollment of each student.
- Students speaking another language or another language is spoken as home, an assessments of the student's English language proficiency will be one.
- The Academy will provide specialized instruction for Students identified as LEP.

12. Administrative/Management Operations

Governance. Board of Directors

a. What will be the roles and responsibilities of the board of directors?

The Board of Directors will have the power and duties permitted by law to set policy, manage the business property and affairs of the Academy.

b. How will new board members be recruited and prepared to fulfill their responsibilities?

New Board members will be elected by a majority vote of the Founding Board members of the Academy. In addition, An Advisory Board will be established within the first year of operation of the Academy. The Advisory Board members will consist of parents, teachers and community representatives. During the second year of the operation of the Academy, the Advisory Board will select a representative from its membership to serve on the Board of Directors. New board members will be provided on-going training prior to and during board meetings. In addition, board members will attend two retreats per year focusing on increasing board member's capacity.

Confusing

c. What will be the internal form of management to be implemented at the school, including any plans to contract with an outside group to manage the school? If there are plans to contract with an outside group, identify the group, describe the relationship between the group and the board of directors, and outline the services the outside group will be providing. If an outside group is used to manage the school, a copy of the proposed management agreement with that group will be required at a future date.

The Board of Directors will contract with Charter Schools Administrative Services (CSAS) to manage the day-to-day operations of the Academy. The four board members have no contractual or family relationship with the Management Company. The Management Company will provide the curriculum for the Academy which has been aligned with the Delaware Core Curriculum; personnel (teacher recruitment and hiring) financial and business management, student recruitment and buildings and grounds maintenance.

d. How will teachers and parents be involved in decision making at the school?

An Advisory Board will be established within the first year of operation of the Academy. The Advisory Board members will consist of parents, teachers and community representatives. During the second year of the operation of the Academy, the Advisory Board will select a representative from its membership to serve on the Board of Directors. New board members will be provided on-going training prior to and during term of office.

13. Staffing

a. What is the proposed size of staff that the school will have in each of its first three years of operation?

The staff will be one teacher per 25 students for a total of 16 teachers in year one, 20 in year two and 28 in year three.

b. List the staff positions and indicate the full-time equivalence for each position for the first year of school operation.

Positions will include Principal/Administrator (2.0 FTE) , 16 Teachers (16 FTE), 2 clerical (2 FTE), 2 custodians (2 FTE), 1 substitute teacher (1 FTE), 2 Teacher aides (2 FTE) and 1 Special Education Teacher (1.0 FTE). Total for year one: 26 FTE.

c. What is the plan for having certified special education teacher(s) available for students with disabilities?

The Academy will recruit appropriately certified teachers for Special Education using the school district ,. Local health agencies and colleges as resources.

d. What will be the criteria and timeline to be used in the hiring of teachers?

Upon the charter approval, the Academy will make every reasonable effort to hire the most qualified applicants for employment based on education, certification, skill, ability, experience and other job-related criteria. The employees will be placed in positions which best utilizes their abilities and offer the best opportunity for both personal and professional growth., We anticipate most teachers positions will be filled by July 2001.

e. Will any non-certified teachers be hired? If non-certified teachers will be hired, what will be the procedures to ensure that the non-certified teachers are participating in alternative certification programs if available?

The Academy will first seek to employ teachers who hold a valid Delaware Teacher's Certificate appropriate for the assignment. If a certified teacher is not available to fill a vacancy, teachers will be hired depending on his/her qualifications to assume the assigned duties and responsibilities. This will be limited to the percentage allowed by law. Special attention will be given for hiring certified instructional personnel who will provide the instructional program for identified disabled students and limited English Proficient students which will be in compliance with the E.S L. in-service requirements. Non-certified teachers will be required to participate in an alternative certification program.

f. What will be the teacher/student ratio of the school?

The teacher student ratio will be one teacher to twenty-five students.

g. What will be the human resources policies governing: salaries, contracts, hiring, and dismissal.

Salaries: It is the policy of the Academy to compensate its employees in a competitive and equitable manner in order to attract and retain the most capable employees, who will contribute to their own success by their contributions to the Academy.

Contracts: The Academy strives to provide all employees with fair and reasonable conditions at all times. However, in order to carry out its business obligations and priorities in the most efficient manner possible, the Academy adheres to the principle of at-will employment whereby the Academy and employees alike may terminate the employment relationship at any time and for any reason

Hiring: It is the policy of The Academy to make every reasonable effort to hire the most qualified applicants for employment based on education, certification, skill, ability, experience and other job-related criteria. New employees are placed in positions which best utilize their abilities and offer the best opportunity for both personal and professional growth.

Whenever possible, openings are filled by promoting or transferring personnel from within the Academy. This is in keeping with the Academy's stated practice of offering optimum career advancement for its employees.

Former employees who have left the Academy in good standing may be considered for re-employment. A previous employee who is re-employed will be considered a new employee from the date of re-employment unless the break in service is less than thirty days, in which case, the employee shall retain applicable benefits (unless local or state law requires otherwise).

Dismissal: Employment may terminate because of an employee's resignation, discharge, retirement, or as a result of a permanent reduction in our work force.

In exercising such policy, The Academy attempts to inform an affected employee confidentially of the circumstances surrounding his/her discharge.

h. What professional development activities/opportunities will be made available to teachers and other staff?

Professional development and staff training provide information to employees so they are kept abreast of the current trends in their respective fields. It is our belief that a well trained employee base that is aware of the rapidly changing innovation makes for an organization that adequately addresses the needs of the company.

Needs assessments that involve all individuals at the Academy are conducted at regularly scheduled intervals. Professional development and staff training activities are scheduled throughout the year to address these needs.

Activities such as goal setting, formulating specific objectives, developing strategies to meet these objectives and selecting and using ongoing assessment tools to determine whether objectives are met or need adjusting are included as part of the professional development and staff training. The primary goal of professional development and staff training is to maximize the skills and talents of all the individuals at the Academy so that the goals and the mission of the Academy are realized.

i. If the school plans to operate outside of state benefit and retirement systems, what benefits will the school offer its employees (including health insurance and retirement)?

The Academy provides a \$15,000 life insurance policy to all regular full time employees. To receive this benefit you will fill out a form provided to you at the time of hire. This form also allows you to participate in the health care and/or dental benefits that are available for yourself and your spouse or dependents.

While the Academy covers the majority of the cost of the health care policy for the employee, this benefit is available only to those who wish to take advantage of it by employee contribution toward the policy.

It is our intention for all employee to participate in the state benefit and retirement systems.

14. School Accountability

a. What methods of internal evaluation will be used by the staff to ensure that the school is meeting its stated educational mission and objectives?

Academic goals, outlined in the curriculum guide will be monitored for readiness and mastery and recorded daily by teachers. Portfolios and Written Student Progress Reports will be shared with parents. This summary of academic student progress as well as social and emotional progress will be sent to parents four times a year.

b. How will the teachers and staff be evaluated?

The Academy maintains a policy of evaluating the job performance of its employees as a means of measuring the efficiency and effectiveness of our operations.

This effort provides employees with meaningful information about their work, and aids the Academy in making personnel decisions related to such areas as training, compensation, promotion, job assignment, retention, and long-range planning of our operations. Evaluation of employees is intended to be participatory in nature, involving the employee's input as much as that of the rating supervisor, thereby helping the employee and the rating supervisor to contribute to the betterment of the Academy

During the initial year of employment, an employee is evaluated at least twice: once within the 90-day period, and at the conclusion of the first year. Thereafter, evaluations are conducted annually, or more frequently as deemed appropriate by supervising personnel.

Among the factors evaluated during the formal performance review are the quality and quantity of the employee's work, work habits, interpersonal relations, and adaptability to job conditions. Each employee is given an opportunity to meet with the evaluating supervisor to openly and candidly discuss the evaluation before it is finalized, whereupon the employee is given a copy of the completed form.

The employee should sign the performance report to acknowledge awareness of its contents and provide time for discussion with the rating supervisor. The signature does not necessarily mean that the signee fully agrees with the content of the report, and he/she may so state on the form before signing.

Where an employee has received a deficiency rating in any category or aspect of work that represents a significant area of job responsibility, the evaluating supervisor may recommend specific corrective action to the Lead Teacher, and notify the employee accordingly.

c. How will the school be held accountable to the parents of children at the school?

Parents reports of progress will consist of and be reported in the following way: Parent Report for the Delaware Student Testing Program (DSTP); individuals/group conference to explaining the test outlining the strengths and weakness of students, explaining the assistance available to get student to grade level, answering questions about the test, answering questions on diploma requirements; Parent-Teacher Conferences after every Report Card, four times per year and In-service to review/explain the complete Parent Report.

An annual report will be available for the Department of Education and the public on the Academy's accomplishments for the previous year. In addition, it will serve as an annual progress report on the plan the school proposed in its original charter application and the progress the Academy is making towards accomplishing the objectives to which it agreed.

d. What internal controls will be used for budgets and financial records?

An educational management company will be hired to supervise the day to day operation n of the Academy. The Management Company has a Academy and Business office that will be responsible for the budgets and financial records. As part of preparing the budgets and financial records, there is a separation of dislikes of the people who do the budgets and who prepare the financial records. Budgets will be done quarterly and compared to the financial statements to verify that the Academy is in line financially to our projection.

15. What is the plan for facilities to accommodate all the students for which the charter is being sought?

A building and maintenance team will identify the facility for the Academy. The facility will be an approved location for the successful operation of a school. The facility will comply with all Fire and Safety codes and occupancy permits will be obtained prior to the beginning of the school year.

a. Where will the school be located? If a specific site has not been identified, indicate the proposed location of the school.

The school will be located in the Dover / Kent Public School District.

b. If a site has been identified, describe the site and how it will be suitable for the proposed school. Will the site be purchased or leased? When will the school's board of directors have direct control of the site?

A specific site at this time has not been identified.

c. Are the facilities in full compliance with all applicable building codes for public schools and are they accessible for special needs students? If the site needs renovation, describe how the facilities will be renovated.

A specific site has not been identified at this time.

d. What funds will be needed to acquire (purchase or lease) the facilities and ready them for school opening? What are the plans for obtaining these funds?

It is anticipated that the facility will be leased. The sponsoring organization, Academy of America, will supply the start up funds for the lease of the facility.

16. What is the plan for transporting students to and from the school?

The Academy will provide transportation for all students, if desired by the parents.

a. Will the school provide transportation or will the local district be asked to provide transportation for the school's students? Describe the plan for providing transportation to all eligible students.

The school will provide transportation, if desired by the parents. They will outsource to a company that will provide services for the school.

b. How will students who reside outside the district in which the school will be located be transported to the school?

The parents will be responsible for taking them to the nearest location where transportation is provided.

c. How will special needs students be transported?

The special needs student's transportation will be reviewed and handled on a case by case basis. The academy will work with the parents to ensure that transportation is provided.

17. School Meals

Describe the plan for providing meals to students.

The Academy will provide lunch for the students attending the Academy. The students who are eligible for free lunch will not have to pay for the meal. Students who are eligible for a reduced lunch will pay an amount determined by local school districts guidelines. All other students will pay full price for the lunch. The food will be provided by a local catering company. The students will pay their teachers at the beginning of the school day and will receive a ticket to show that they have paid for the lunch. The ticket will then be given to the person serving lunch and the student will receive the meal.

Should be annual review

18. Start-Up Activities

What administrative tasks will be undertaken between approval of the charter and school opening? Describe the tasks, how they will be accomplished, who will accomplish them, and the timetable on which they will be accomplished.

Assuming the charter is approved in April, 2000, then in May, June, July and August, a review of the city will be performed to determine where the Academy facility should be locate and we will meet with the community to gather additional community support for the charter school. All legal filings will be done. In September, October, November and December, after a facility has been located, we will review the transportation route to ensure that the busses will accommodate all areas of the city for our students. Review all state and local requirements for charter schools to ensure that all regulations are met. Assignment an accountant to be responsible for the record keeping and all financial matters. In January, February, March, and April, we will began the recruitment process which includes advertising for students via flyers, newspapers, radio, and word of mouth. The flyers will be distributed to all diverse communities in the area. A director will be hired to be responsible for the overall handling of the charter school. In May, June, and July, we will began the enrollment process, hire the principal and staff for the Academy, provide training for the principal and staff. We also will lease and renovate the facility to ensure that all fire and safety codes are met. Develop food system program that will be in place within the charter school. There are other tasks that will take place during the above time period, however the major ones are listed above. The Management Company will be responsible for all of the above tasks.

Financial Viability

19. Projected Budget

- a. What costs are projected for the twelve-month period prior to school opening? What will be the source(s) of funds to cover these costs?**

The projected cost for the twelve months prior to the school opening is \$193,500. These funds will come from the sponsoring organization, Academy of America.

NOTE: If available, the Delaware Department of Education may offer federal startup funds to newly approved Delaware charter schools. As a condition of the award of these funds, charter schools will be required to generate a development plan and direct all or a portion of those funds to specific startup tasks. The application must acknowledge this possibility and indicate the applicant's willingness to cooperate in these conditions. Additional eligibility requirements may be in effect - check with the Charter Schools Administrator for details.

- b. Are there plans to conduct any fund-raising efforts to generate startup capital or to supplement the per pupil revenues from the state and local districts? If so, please explain.**

There are no plans to conduct any fund-raising to generate start-up capital.

- c. Will there be other sources of revenue in addition to the state and local entitlements? If so, please identify all other sources of funds.**

No

- d. What will be the budget for the school (please use the attached budget worksheets)? Note: state and local revenue estimates may be obtained from the Education Specialist for School Accounts at the Delaware Department of Education (302) 739-4664. The applicant must attach as an appendix, a copy of the original budget revenue estimate from the Department of Education to verify the figures on which the proposed budget has been based.**

NOTE: The Delaware Department of Education will provide estimates of state and local revenue upon request. Estimates will be based on a number of assumptions which the applicant must make regarding the numbers of students anticipated at each grade, the number of students anticipated from various districts, the anticipated special education classifications of enrolling students, and the qualifications of teachers hired by the school. These estimates must be viewed with caution since the assumptions upon which the applicant may have based them may hang once students actually enroll and staff are hired.

See attached budget

e. What will be the back-up plan for the finances of the school if actual enrollment is below the projections presented in this application? What is the minimum number of students the school can enroll each year to remain open?

If the school does not meet our objectives for enrollment, then the staff will be reduced to reflect the actual enrollment. In addition, other variable costs will be cut to maintain a balanced budget. The Academy can maintain a balanced budget and remain open with at least 100 students.

f. If the school is to be managed by an outside group(s), what financial arrangements will be made between the board of directors and this group(s)?

The Academy will have an outside management company. The Academy will pay that company 10% of its revenue or as specified in the Management Agreement.

g. If public funds remain at the end of a fiscal year, what will be the disposition of those funds?

Performance bonuses will be given to teachers based on their performance during the school year. These bonuses have been included in the budget. At the end of the school year the Academy's principal and director will prepare a rating system for the teachers. The teacher's performance bonus will be based on the results of their rating. All public funds that remain at the end of a fiscal year will be carried over and used in the next fiscal year.

20. Financial Operations

a. How will the financial operations of the school (in the areas of accounting, payroll, purchasing, compensation, and benefits management) be managed?

The Management Company will manage all business functions as well as curriculum functions, subject to Board review and approval when required.

b. Will the school operate within all state administrative and financial systems? If not, what specific procedures have been undertaken to gain approval for alternate administrative and financial system(s)?

The Academy will operate within all state administrative and financial systems.

21. Legal Liability

What has been done to assess the legal liability of the school, its employees, and the board of directors? What are the various options being considered for liability protection? Describe the types and limits of insurance coverage the school plans to obtain. The proposed costs for the coverage must be reflected in the budget worksheets. The applicant should contact the Insurance Coverage Office at (302) 739-3651 for further information on liability protection for public schools in.

An analysis has been performed to ascertain the requirements for the legal liability of the school, its employees, and the board of directors. The insurance's will be purchased from the General Agency Company. The types and limits of insurance coverage the school plans to obtain are; General Liability - \$2,000,000.00; Directors and Officers Liability - \$2,000,000.00; Auto Liability Insurance - \$1,000,000.00; Employee Dishonesty - \$500,000.00; Workers Compensation - as required by law. These insurance coverages are reflected in the budget worksheets.

Student Discipline Policies

22. Code of Conduct

What will be the school rules and guidelines governing student behavior? Include a general outline of the student handbook describing issues of student discipline, student rights, and student responsibilities. Describe how discipline will be handled with special education students.

The Academy's Disciplinary Procedure will follow all, but not be limited to the listed requirements below, of the Delaware Department of Education.

The Academy will:

- Report all cases of violent or potentially criminal acts committed by anyone against a student, school volunteer, or a school employee on school property or at a school function; report possession of a controlled substance, a weapon, or a dangerous instrument by any one on school property or at a school function;
- Participate in training related to the reporting process for school administrators;
- Establish a policy on school/police relations and develop a Memorandum of Agreement (MOA) with each police department that provides police coverage to the Academy;
- Advise each school employee, at the time of hiring and at the beginning of every school year thereafter, (as defined in Del.C., Title 14, Section 4112) of his/her duty to report school crimes and the penalty for failure to so report.

In addition, the Academy has established policies on student rights and responsibilities in the form of a Parent/Teacher Handbook. The policies will be in accordance with the Guidelines for the Development of District Policies on Student Rights and Responsibilities, and the State Board policy on the possession, use, and distribution of drugs and alcohol. These policies will be included in the Parent/Student Handbook which has been established by the Academy and will be distributed to every parent and student enrolled.

Student discipline: When there is a discipline referral, the administration will explain the nature of the referral to the student. The student may admit or deny the accusation at this time. If the student denies the nature of the supporting evidence as presented, the student may explain his or her side of the case. When disciplinary measures are administered, the student and or parent/guardian may request a conference with an administrator involved or with the next level of authority.

Students with disabilities will continue to receive service until a parent conference has been convened. This policy is pursuant to the state and federal requirements regarding exclusion of students with disabilities from school.

23. Health and Safety

What procedures will be implemented to ensure the health and safety of the school's students, staff, and guests? What staff (e.g. nurse) will be hired or contracted with to ensure that these responsibilities will be handled in a satisfactory manner?

The Academy recognizes that the promotion of the health of students is the responsibility of all staff members. The Academy will make every effort to assure that all faculty is familiar with regulations related to this aspect of the Academy's program.

a. Ensuring that students have physical examinations prior to enrollment

School health appraisals, by a licensed physician, will be required for all first time enrollees. These appraisals will become a part of the students school records.

b. Administering medications and medical treatments, including first aid.

Students who require specific attention for identified medical treatment should be directed to follow the procedures listed below:

- Parents must submit a request for students to use medication or a medical device during school.
- Instructions for storage, duration of use and assistance to be given by school personnel must be clearly delineated by the student's attending physician.
- If instructions are not clear or beyond the academy's current capability, the principal should telephone the parent and the attending physician to request clarification and training for school staff. Document all inquiries and outcomes in writing;
- If medications are required in conjunction with a breathing apparatus or other device, then procedure for administering medications in school should be followed.
- At the request of the parent, school personnel will store student medical devices as space permits.
- Cleaning and replacement of items will be the responsibility of the parent/guardian.

c. Monitoring student health and maintaining health records.

A Health Record is to be filled out with all available information for any student entering the Academy. The Health Record is used to alert staff, particularly the homeroom teacher and physical education staff, to any health condition which might limit physical activity or create a medical emergency for the student. Any information provided by the student's physician that pertains to chronic conditions should be record on the Health Record. Any health conditions not confirmed in writing by the child's physician or any health conditions such as HIV/Aids or any other communicable diseases may not be mentioned in the student's records.

d. Ensuring that immunizations and TB and HepB screenings are conducted.

In accordance to Del.C., Title 14, Section 131, The Academy shall not permit a child to enter school without acceptable evidence of immunization. The parent or legal guardian shall be notified of this requirement in writing. Within 14 calendar days of the notice, evidence will be presented that the basic series of immunizations has been initiated or completed. A child will be admitted conditionally once the schedule of immunizations has been initiated. If the student fails to complete the series of required immunizations, the parent or guardian will be notified that the child will be excluded. Conditions for exemption from the immunization requirement will be followed as addressed in Del.C., Title 14, Section 131. A student being enrolled in the Academy for the first time must present a record of immunization (e.g. TB and HepB), unless the student claims one of the permitted exceptions

e. Serving on IEP teams when medical treatment is required.

The academy will use an outside registered nursing service to administer medication to the students on as needed bases. The academy will pay for these services from the state aid funds.

f. Screening for health problems (vision, hearing, etc.).

The academy will use outside vision and hearing professionals to administer screenings to the students on an as needed bases. The academy will pay for these services from the state aid funds.

For all other students

Budget Worksheets

Charter School Application Budget WorkSheets

ACADEMY OF DOVER

REVENUE*

	Planning Year	OPERATING YEARS		
		400	500	700
		YEAR 1	YEAR 2	YEAR 3
State Appropriations		1832976	2291220	3207708
Local Fund Transfers		284143	355179	497250
Charter school Federal Funds		30000		
Other Federal Funds				
Other (Please specify)**	210000			
(Money from Academy of America)				
TOTAL REVENUE =	210000	2147119	2646399	3704958

* State and local revenue estimates are to be obtained from the Education Specialist School Accounts, at the Delaware Department of Education (302) 739-4664.

** Additional lines may be added if necessary or other revenue sources can be outlined on an attached sheet. Please indicate total revenue from all sources here.

EXPENSES

Personnel \$

(Please indicate FIES - Full Time Equivaents)

	Planning Year	OPERATING YEARS			FTEs
		400	500	700	
		YEAR 1	YEAR 2	YEAR 3	
Salaries					
Teachers	6000	400000	500000	700000	16
Principal/Administrative	6000	75000	93750	131250	2
Clerical		33000	41250	57750	2
Custodial		33000	41250	57750	2
Substitutes		25000	31250	43750	1
Other (Teacher Aid/Spe. Ed)		70000	87500	122500	3
Other Employee Costs (a)					
Health Insurance		123700	154625	216475	25
Pension		25000	31250	43750	25
FICA		44392	55490	77686	25
Medicare		9308	11635	16289	25
Worker's Compensation		10000	12500	17500	25
Unemployment Insurance		6000	7500	10500	25
Other Benefits (Performance Budget)		80000	100000	140000	

15
net
reflect

(a) The percentage rates for certain employment costs should be obtained from the Education Specialist, School accounts, at the Delaware Department of Education (302) 739-4664 if the Charter School chooses to utilize State benefits.

EXPENSES (continued)

Student Support \$	Planning Year	OPERATING YEARS		
		YEAR 1	YEAR 2	YEAR 3
Transportation		224961	281201	393682
Cafeteria		50000	62500	87500
Extra Curricular		10000	12500	17500
Supplies and Materials	3000	50000	62500	87500
Textbooks	60000	25000	31250	43750
Computers		60000	75000	105000
Contracted Services	75000	5000	6250	8750
Other (Stall Develop)		20000	25000	35000
Contingency Funds		10000	12500	17500
SUBTOTAL Student Support =	138000	454961	568701	796182

Administrative/Operations Support \$	Planning Year	OPERATING YEARS		
		YEAR 1	YEAR 2	YEAR 3
Insurance (Property/Liability)		10000	12500	17500
Rent	25000	144000	180000	252000
Mortgage				
Utilities	1000	18000	22500	31500
Maintenance		80000	100000	140000
Supplies & Materials	2000	10000	12500	17500
Equipment Lease/Maintenance		8000	10000	14000
Equipment Purchase		10000	12500	17500
Telephone/Communications	5000	12000	15000	21000
Accounting & Payroll	3000	15000	18750	26250
Printing & Copying	7000	7000	8750	12250
Postage & Shipping	500	5000	6250	8750
Administrative/Operations		214712	268390	375746
Other (Repayment of loan)		210000		
SUBTOTAL Administrative/Operations Support	43500	743712	667140	933996

EXPENSES SUBTOTAL \$	Planning Year	OPERATING YEARS		
		YEAR 1	YEAR 2	YEAR 3
Personnel	12000	934400	1168000	1635200
Student Support	138000	454961	568701	796182
Administrative/Operations	43500	743712	667140	933996
GRAND TOTAL				
ALL EXPENSES	193500	2133073	2403841	3365378
Profit or (Loss)	16500	14046	242558	339581

Dover

FY 2000 Charter School Revenue Calculation - Preliminary

Parameters:

1. 400 Students
2. Grades K - 6 (58 K, 171 1-3, 171 4-6)
3. 400 Regular, Special
4. 200 Caesar Rodney, 200 Capital
5. Transportation provided to 340 students by charter school
6. Meals will be served but not prepared by the school

State Funding

Academy of America - Dover

# of Students =	400		
# per grade =	See Above		
Number of regular students 7 - 12 =	0	Unit size regular students 7 - 12 =	20
Number of regular students 4 - 6 =	171	Unit size regular students 4 - 6 =	20
Number of regular students 1 - 3 =	171	Unit size regular students 1 - 3 =	17.4
Number of Kindergarten students =	58	Unit size Kindergarten students =	34.8
Number of EMH students =	0	Unit size EMH students =	15
Number of SED students =	0	Unit size SED students =	10
Number of LD students =	0	Unit size LD students =	8
Number of TMH students =	0	Unit size TMH students =	6
Number of SMH students =	0	Unit size SMH students =	6
Number of PI students =	0	Unit size PI students =	6
Number of HHPD students =	0	Unit size HHPD students =	6
Number of BLIND students =	0	Unit size BLIND students =	8
Number of PTST students =	0	Unit size PTST students =	10
Number of ATSTC students =	0	Unit size ATSTC students =	4
Number of DFBLD students =	0	Unit size DFBLD students =	4
Number of ILC students =	0	Unit size ILC students =	8.6

		FY 1999 Average Cost Per Position	Academy of America - Dover
# of Div I Units Generated =	21.00	\$25,706	\$539,826
Administrative Assistant =	1.00	\$43,500	\$43,500
Percentage 11 Month Supervisor =	0.14	\$34,142	\$4,780
Percentage Transportation Supervisor =	0.05	\$37,246	\$1,862
Principal =	1.00	\$47,642	\$47,642
Assistant Principal =	0.00	\$45,192	\$0
Percentage Psychologist =	0.14	\$32,840	\$4,598
Percentage Speech/Hearing =	0.15	\$31,105	\$4,666
Percentage Visiting Teacher =	0.08	\$33,000	\$2,640
Percentage Driver Education Teacher =	0.00	\$28,975	\$0
Nurse =	0.00	\$28,831	\$0
Academic Excellence Units =	1.60	\$32,045	\$51,272
Clerical Units =	2.00	\$20,840	\$41,680
Custodial Units =	1.00	\$17,410	\$17,410
Cafeteria Manager =	0.00	\$10,187	\$0
Cafeteria Worker =	1.64	\$6,240	\$10,234
Related Service Specialist =	0.00	\$33,730	\$0
Total Staffing =	29.80		
Total Staffing For Health Insurance =	28.16		

Total Salary Costs =	\$770,109
OEC's @ 17.97% =	\$138,389
Health Insurance @ \$5,025 per FTE =	\$141,504

Subtotal Personnel Revenue =	\$1,050,002
-------------------------------------	--------------------

Other State Sources (based on Latest Available Values)

Academy of America - Dove

Professional & Curriculum Development		\$8,328
Teacher to Teacher Cadre =		\$1,757
Division II Units (No Vocational Courses) =	21.00	
Division II - All Other Costs - Current Unit Value =	\$3,247	\$68,187
Division II - Energy - Current Unit Value =	\$1,480	\$31,080
Division III - Equalization - Unit Value =	\$12,933	\$271,593
Academic Excellence Division III =		\$20,693
Academic Excellence Division II =		\$5,195
Academic Excellence Allotment =		\$11,403
Tuition Reimbursement =		\$1,638
Student Discipline Programs =		\$30,000
Extra Time for Students K - 12 =		\$30,219
Early Intervention Reading (K - 3) =		\$2,875
MCI/Annual Maintenance =		\$23,600
Technology for Staff and Students =		\$15,045
One-Time Building Improvements =		\$36,400
Student Transportation Amount =		\$224,961

Subtotal Other Sources = \$782,974

Grand Total State Sources = \$1,832,976

Amount Loaded July 1 = \$1,374,732

Remainder to Load = \$458,244

Local Funding Academy of America - Dover

Caesar Rodney

29 Kindergarten Students = \$9,338
86 Regular Students 1 - 3 = \$58,394
85 Regular Students 4 - 6 = \$54,825

Total = \$122,557 **July Advance = \$42,895**

Remaining Transfer = \$79,662

Capital

29 Kindergarten Students = \$12,325
85 Regular Students 1 - 3 = \$76,075
86 Regular Students 4 - 6 = \$73,186

Total = \$161,586 **July Advance = \$56,555**

Remaining Transfer = \$105,031

Total Local Funding = \$284,143

July Advance = \$99,450

Remainder to Be Transferred = \$184,693

Certificate of Incorporation

CERTIFICATE OF INCORPORATION

OF

ACADEMY OF DOVER, INC.

1. The name of the corporation is ACADEMY OF DOVER, INC..
2. The address of its registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

3. The nature of the business or purposes to be conducted or promoted is: To operate exclusively for educational purposes, to-wit:

To operate schools for the education of students in grades kindergarten through twelfth grade and to confer High School Diplomas to its graduates, after review and approval of its Trustees.

To provide non-classroom instructions including but not limited to seminars, public forums, field trips, cooperative job training, as the Board of Trustees shall authorize for the education of its students.

To foster quality of opportunity for students by promoting their continued growth and confidence and their usefulness, by encouraging their participation in a wide variety of curricular and extra curricular activities, and by seeking recognition of their potential.

To own and/or lease and operate school facilities in such locations as the Board of Trustees shall determine.

To establish policies, plans and procedures for the implementation and administration of the designated purposes.

Admission to any school owned or operated by this corporation shall not be denied on the basis of race, color, creed or national origin.

The corporation shall engage directly in the support of such purposes and may make distributions to other organizations that qualify as exempt organizations under Section 501 (C)(3) of the Internal Revenue Service Code.

4. The corporation shall not have any capital stock, and the conditions of membership shall be stated in the bylaws.
5. The name and mailing address of each incorporator is as follows:

David K. McDonnell, 401 South Old Woodward, Suite 450, Birmingham, MI 48009


6. The name and mailing address of each person who is to serve as a director until the first annual meeting of the members or until a successor is elected and qualified, are as follows:

Leicester C. Allen, President/Director	20755 Greenfield Road, Ste 300 Southfield, MI 48075
David K. McDonnell, VP/Director	401 South Old Woodward, Ste 450 Birmingham, MI 48009
Mattie L. Allen, Treasurer/Director	20755 Greenfield Road, Ste 300 Southfield, MI 48075
Dana Allen, Director	20755 Greenfield Road, Ste 300 Southfield, MI 48075
Aaron Allen, Director	20755 Greenfield Road, Ste 300 Southfield, MI 48075
Nathalia Brooks, Director	20755 Greenfield Road, Ste 300 Southfield, MI 48075

7. The corporation shall have perpetual existence.
8. In furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized: To make, alter or repeal the by-laws of the corporation.
9. Elections of directors need not be written ballot unless the bylaws of the corporation shall so provide. Meetings of members may be held within or without the State of Delaware, as the bylaws may provide. The books of the corporation may be kept (subject to any provision of law) outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the by-laws of the corporation.
10. The corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred upon members herein are granted subject to this reservation.

I, THE UNDERSIGNED, being each of the incorporators hereinbefore named, for the purpose of forming a corporation pursuant to the General Corporation Law of Delaware, do make this certificate, hereby declaring and certifying this is our act and deed and the facts herein stated are true, and accordingly have put our hands this 27 day of February, 2000.

DAVID K. MCDONNELL, INCORPORATOR



Management Agreement



MANAGEMENT AGREEMENT

This Management Agreement is made and entered into on the 10 day of MARCH, 2000, by and between **Charter School Administration Services, Inc.**, a Michigan corporation ("CSAS"), and **Academy of Dover**, an Delaware non-profit corporation (the "Academy").

The following is a recital of facts underlying this Agreement:

The Academy is a charter school, organized as a "charter school" under Chapter 5 of Title 14, Part I of the Delaware Code (the "Code"). The Academy has applied for a contract for charter (the "Contract") with the Delaware Department of Education ("DOE") to organize and operate a charter school, under the name "Academy of Dover", or upon such other name as may be selected by the Academy.

CSAS currently manages nine charter schools in the Detroit Metropolitan area (Academy of Southfield, Academy of Oak Park, Academy of Detroit West, Academy of Lathrup Village, Academy of Westland, Academy of Michigan, Academy of Flint, Academy of Inkster, and Cherry Hill School of Performing Arts), four open-enrollment charters school in Texas (Academy of Houston, Academy of Dallas, Academy of San Antonio, and Academy of Beaumont), a community school in Toledo, Ohio (Academy of Technology and Business), and a charter school in Missouri (Academy of Kansas City). CSAS is also negotiating additional management arrangements with charter schools in Delaware, Michigan, Texas, Ohio, Missouri, and elsewhere, commencing in the 2000-2001 academic year, and will likely enter into additional management agreements for the 2001-2002 academic year. CSAS was also instrumental in the creation of most of these charter schools, having incorporated the schools, recruited their initial boards of directors, prepared the

applications with authorizing bodies for the contracts to become charter schools, and prepared the curriculum and related documents submitted with the applications and essential for the operation of the schools. Similarly, the principals of CSAS were instrumental in the creation of the Academy, having incorporated the Academy, prepared the application with DOE to become a charter school, and prepared the curriculum and related documents submitted with the application and essential for the operation of the Academy. The principals of CSAS currently operate a chain of kindergarten and pre-kindergarten schools (Do Re Mi Learning Centers) throughout the Detroit Metropolitan area. Furthermore, the principals of CSAS are also the founders and principal administrators of three private schools (Academy of Detroit in Detroit, Academy of Detroit North in Southfield, and Academy of Detroit North in Oak Park) which provide quality education for students in grades pre-kindergarten through 12th grade.

The Academy and CSAS desire to create an enduring educational relationship, whereby the Academy and CSAS will work together to bring educational excellence and innovation to the Dover Metropolitan area, based on both (a) the Academy's school design and educational program, as incorporated in the Academy's application with the DOE for the Contract (the "Application"), and (b) CSAS' school design, comprehensive educational program, and management principles, as currently incorporated within the operations of the charter schools currently managed by CSAS, the Do Re Mi Learning Centers and the Academy of Detroit private schools. In order to facilitate the commencement of school for the 2001-2002 school year and the continuation of school indefinitely thereafter, and to implement an innovative educational program at the school, the parties desire to establish this arrangement for the management and operation of the Academy.

Therefore, it is mutually agreed as follows:

ARTICLE I

CONTRACTING RELATIONSHIP

A. **Authority.** The Academy represents that it is authorized by law to contract with a private entity and for that entity to provide educational management services. The Academy further represents that it has been, or will be, granted the Contract by DOE to organize and operate a charter school. The Academy is therefore authorized by DOE to supervise and control such school, and is invested with all powers necessary or desirable for carrying out the educational program contemplated in this Agreement.

B. **Contract.** The Academy hereby contracts with CSAS, to the extent permitted by law, for the provision of all labor, materials and supervision necessary for the provision of educational services to students, and the management, operation and maintenance of the Academy, in accordance with educational goals, curriculum, methods of pupil assessment, admission policy and criteria, school calendar and school day schedule, and age and grade range of pupils to be enrolled, educational goals, and method to be used to monitor compliance with performance of targeted educational outcomes, all as previously adopted by the Board of Directors of the Academy (the "Board") and included in the Contract between the Academy and DOE.

C. **Status of the Parties.** CSAS is a for-profit Michigan corporation, and is not a division or a part of the Academy. The Academy is a non-profit corporation authorized to operate a charter school under the Code, and is not a division or part of CSAS. The relationship between CSAS and the Academy is based solely on the terms of this Agreement, and the terms of any other agreements between CSAS and the Academy.

ARTICLE II

TERM

A. **Term.** This Agreement shall become effective as of August 1, 2001, and shall cover five academic years commencing on August 1, 2001 and ending on July 31, 2006. Each academic year in this Agreement shall commence on August 1 and end on July 31 of the following year.

B. **Renewal.** This Agreement shall be automatically renewed for an additional term of one year, and from year to year thereafter, unless written notice of intent to terminate or renegotiate is given by either party not later than May 31st of the first year of the agreement, or to any subsequent May 31st if the agreement has been renewed. By way of illustration, if neither party provides written notice of intent to terminate or renegotiate this Agreement on or before May 31, 2006, then this Agreement shall be automatically renewed for an additional one year, and the term of this Agreement will end on July 31, 2007; if this Agreement is so renewed and if neither party provides written notice of intent to terminate or renegotiate this Agreement on or before May 31, 2007, then this Agreement shall be automatically renewed for an additional one year, and the term of this Agreement will end on July 31, 2008.

ARTICLE III

FUNCTIONS OF CSAS

A. **Responsibility.** CSAS shall be responsible, and accountable to the Board, for the administration, operation and performance of the Academy.

B. **Educational Program.** The educational program and program of instruction to be provided by CSAS at the Academy is described in detail in the Application (the "Educational Program"). The Educational Program has been reviewed and approved by the Board and, by unanimous resolution of the Board, adopted for use at the Academy. The Educational Program may

be adapted and modified by CSAS from time to time, it being understood that an essential principal of this Educational Program is its flexibility, adaptability and capacity to change in the interest of continuous improvement and efficiency, and that the Academy and CSAS are interested in results and not in inflexible prescriptions. Any substantial adaption or modification of the Educational Program shall be subject to the prior approval of the Board and, if required under the Contract or by the Code, by DOE.

C. **Specific Functions.** CSAS shall be responsible for all of the management, operation, administration, and education at the Academy. Such functions include, but are not limited to:

1. implementation and administration of the Educational Program, including the selection and acquisition of instructional materials, equipment and supplies, and the administration of any and all extra- and co-curricular activities and programs;
2. management of all personnel functions, including professional development for the School Administrator and all instructional personnel and the personnel functions outlined in Article VI;
3. control, maintenance and operation of the school building, which the Board shall lease or otherwise provide to CSAS, and the installation of technology integral to the school design;
4. all aspects of the business administration of the Academy;
5. the provision of transportation and food service for the Academy; and
6. any other function necessary or expedient for the administration of the Academy.

D. **Subcontracts.** CSAS reserves the right to subcontract any and all aspects of all other services it agrees to provide to the Academy, including, but not limited to transportation and/or food service. However, CSAS shall not subcontract the management, oversight or operation of the teaching and instructional program, except as specifically permitted in this Agreement or with approval of the Board.

E. **Place of Performance.** CSAS reserves the right to perform functions other than instruction, such as purchasing, professional development, and administrative functions, off-site at CSAS' other locations, including locations outside of the State of Delaware, unless prohibited by state or local law.

F. **Student Recruitment.** CSAS and the Board shall be jointly responsible for the recruitment of students subject to agreement on general recruitment and admission policies. Students shall be selected in accordance with the procedures set forth in the Contract and in compliance with the Code and other applicable law.

G. **Due Process Hearings.** CSAS shall provide student due process hearings in conformity with the requirements of state and federal law regarding discipline, special education, confidentiality and access to records, to an extent consistent with the Academy's own obligations. The Academy shall retain the right to provide due process as required by law.

H. **Legal Requirements.** CSAS shall provide educational programs that meet federal, state, and local requirements, and the requirements imposed under the Code and the Contract, unless such requirements are or have been waived, but the Academy shall interpret state and local regulations liberally to give CSAS flexibility and freedom to implement its educational and management programs.

I. **Rules & Procedures.** CSAS shall recommend reasonable rules, regulations and procedures applicable to the Academy and is authorized and directed to enforce such rules, regulations and procedures adopted by the Academy.

J. **School Year and School Day.** The school year and the school day shall be as provided in the Application for the Contract submitted to and approved by DOE.

ARTICLE IV

OBLIGATIONS OF THE BOARD

The Board shall meet to review and provide good faith consideration of recommendations which CSAS may develop from time to time regarding matters within the scope of the duties and obligations of CSAS pursuant to this Contract, including, but not limited to, educational programs, policies, rules, regulations, procedures, curriculum and budget, subject to constraints of law and requirements of the Contract with DOE.

The Board shall retain the authority, as provided in the Code, to make reasonable regulations relative to anything necessary for the proper establishment, maintenance, management, and carrying on of the Academy, including regulations relative to the conduct of pupils while in attendance at the school or en route to and from the school. The Board shall retain the obligation, to the extent required in the Code, to adopt written policies governing the procurement of supplies, materials, and equipment.

The Board may delegate any or all of these responsibilities and authorities to such staff personnel, program committees, subcommittees of the Board, or other designees as it may determine from time to time.

ARTICLE V

FINANCIAL ARRANGEMENTS

A. **Capitation Fee.** The Academy shall pay CSAS an annual capitation fee, in an amount equal to ten (10%) percent of the per pupil expenditures ("PPE") that the Academy receives and spends from all sources for the particular students enrolled in the Academy. The PPE may change during the term of this Agreement according to overall changes in the state or local school aid payment, monies or services provided by other state or local agencies, and the extent of other revenue sources. The capitation fee shall be paid to CSAS as and when state or local school aid payments, or funds from other state or local agencies or other revenue sources, are received by the Academy.

B. **Other Revenue Sources.** In order to supplement and enhance the state school aid payments, and improve the quality of educational at the Academy, the Board and CSAS shall endeavor to obtain revenue from other sources. In this regard:

1. The Academy may solicit and receive grants and donations consistent with the mission of the Academy;
2. The Academy and/or CSAS may apply for and receive grant money, in the name of CSAS or the Academy; and
3. To the extent permitted under the Code, CSAS may charge fees to students for extra services such as summer and after school programs, athletics, etc., and charge non-Academy students who participate in such programs.

All funds received from such other revenue sources shall be deemed a part of the PPE and included within the calculation of the capitation fee.

C. **Payment of Costs.** Except as otherwise provided in this Agreement, all costs incurred in providing the Educational Program at the Academy shall be paid by the Academy. Such costs shall include, but shall not be limited to, salaries for all personnel, curriculum materials, textbooks, library books, computer and other equipment, software, supplies, building payments, maintenance, and capital improvements. CSAS may, at its election and in order to gain various economies and efficiencies, elect to incur certain of such costs directly and, in such event, the Academy shall reimburse CSAS for such costs on demand.

D. **Start-up Funds.** CSAS, in its discretion, may provide start up funds for the Academy, including funds for the development of a curriculum, technology system and school operations plan; recruiting, selecting and pre-service training of staff members; and cleaning, fixing and equipping of the Academy building and related capital facilities; all pending receipt by the Academy of its initial school aid payments. The Academy shall reimburse CSAS such start up funds upon receipt of such state school aid payments.

E. **Other Charter Schools.** The Academy acknowledges that CSAS has, or will, enter into similar management agreements with other charter schools and public school academies, in Delaware, Michigan, Florida, Texas, Missouri, Ohio, or elsewhere. CSAS shall separately account for reimbursable expenses incurred on behalf of the Academy and other charter schools, and only charge the Academy of expenses incurred on behalf of the Academy. If CSAS incurs reimbursable expenses on behalf of Academy and other charter schools which are incapable of precise allocation between such academies, then CSAS shall allocate such expenses among all such schools, including the Academy, on a pro rata basis based upon the number of students enrolled at such schools, or upon such other equitable basis as is acceptable to the parties.

F. **Financial Reporting.** CSAS shall provide the Board with:

1. a projected annual budget prior to opening the Academy and with a projected annual budget prior to each school year thereafter;
2. detailed statements of all revenues received, from whatever source, with respect to the Academy, and detailed statements of all direct expenditures for services rendered to or on behalf of the Academy, whether incurred on-site or off-site, upon request;
3. annual audits in compliance with state law and regulations showing the manner in which funds are spent at the Academy;
4. reports on Academy operations, finances and students performance, upon request, but not less frequently than four (4) times per year; and
5. other information on a periodic basis to enable the Board to monitor CSAS' educational performance and the efficiency of its operation of the Academy.

G. **Access to Records.** CSAS shall permit the Board, DOE, and all authorized representatives of the Board and of DOE, to have access to all of the books and records of the Academy in the possession of CSAS, and of all of the books and records of CSAS relating to the operation of the Academy, and such books and records shall be available for inspection and duplication during regular business hours.

ARTICLE VI

PERSONNEL & TRAINING

A. **Personnel Responsibility.** CSAS shall have the sole responsibility and authority to determine staffing levels, and to select, evaluate, assign, discipline and transfer personnel, consistent

with state and federal law, and consistent with the parameters adopted and included within the Educational Program.

B. School Administrator. Because the accountability of CSAS to the Academy is an essential foundation of this partnership, and because the responsibility of the School Administrator of the Academy is critical to its success, the School Administrator will be an employee of CSAS and CSAS will have the authority, consistent with state law, to select and supervise the School Administrator and to hold him or her accountable for the success of the Academy. The employment contract with the School Administrator, and the duties and compensation of the School Administrator shall be determined by CSAS. The School Administrator and CSAS, in turn, will have similar authority to select and hold accountable the teachers in the Academy.

C. Teachers: Prior to the commencement of the 2001-2002 academic year by the Academy, and from time to time thereafter, CSAS shall determine the number of teachers, and the applicable grade levels and subjects, required for the operation of the Academy. CSAS shall provide the Academy with such teachers, qualified in the grade levels and subjects required, as are required by the Academy. Such teachers may, in the discretion of CSAS, work at the Academy on a full or part time basis. If assigned to the Academy on a part time basis, such teachers may also work at other schools managed or operated by CSAS. Each teacher assigned or retained to the Academy shall hold a valid teaching certificate issued by DOE under the Code, to the extent required under the Code.

D. Support Staff: Prior to the commencement of the 2001-2002 academic year by the Academy, and from time to time thereafter, CSAS shall determine the number and functions of support staff required for the operation of the Academy. The parties anticipate that such support staff shall include student counselors, curriculum development staff, an attendance officer, clerical

staff, administrative assistants to the School Administrator and the Board, a bookkeeping staff, maintenance personnel, and the like. CSAS shall provide the Academy with such support staff, qualified in the areas required, as are required by the Academy. Such support staff may, in the discretion of CSAS, work at the Academy on a full or part time basis. If assigned to the Academy on a part time basis, such support staff may also work at other schools managed or operated by CSAS.

E. Employer of Personnel. The Academy and CSAS shall mutually determine whether the personnel who perform services at the Academy shall be employees of the Academy or of CSAS. The parties agree that initially all of the staff will be employees of CSAS, but such determination may change from time to time. Compensation of all employees of the Academy shall be paid by the Academy and the Academy shall reimburse CSAS for the compensation paid to employees of CSAS who perform services on behalf of the Academy. For purposes of this Agreement, compensation shall include salary, bonuses, fringe benefits, pension and profit sharing payments, state and federal tax withholdings, and any other payments to or for the benefit of an employee.

F. Training. CSAS shall provide training in its methods, curriculum, program, and technology, to all teaching personnel, on a regular and continuous basis. Non-instructional personnel shall receive such training as CSAS determines as reasonable and necessary under the circumstances.

ARTICLE VII

ADDITIONAL PROGRAMS

A. Additional Programs. The services provided by CSAS to the Academy under this Agreement consist of the Educational Program during the school year and school day, and age and grade level, as set forth in the Contract, as such school year, school day, and age and grade level

may change from time to time. CSAS may, in its discretion, provide additional programs, including, but not limited to, pre-kindergarten, summer school and latch-key programs. In such event, CSAS may retain the full amount of any and all revenue collected from or for such additional programs, and CSAS shall be responsible for the full cost of providing such additional programs.

B. Food Service and Transportation. CSAS may, in its discretion, provide food service and transportation services to students at the Academy. In such event, CSAS may retain the full amount of any and all revenue collected from or for such food and transportation services, and CSAS shall be responsible for the full cost of providing such services.

C. Computer Equipment: The parties acknowledge that computers and related equipment, for use by students of the Academy, is an integral part of the the Educational Program, and that computer equipment is likewise necessary for the efficient operation and administration of the Academy. Accordingly, CSAS may, in its discretion, provide computers, printers, servers, and related equipment, for the classrooms, school offices, and school administration on a lease basis. If such equipment is provided by CSAS, the Academy shall pay CSAS the prevailing lease rate, which shall be determined by lease rate quotations by CSAS and two other computer equipment lessors. All other terms and conditions of the lease shall be as set forth in CSAS' form equipment lease currently in use. The Academy shall be obligated to pay the prevailing rate for the lease of the computer equipment, and be subject to all of the other terms and conditions set forth in CSAS' form equipment lease, from the date the equipment is made available by CSAS to the Academy and so long as such equipment is made available, whether or not the lease has been signed or approved by the Academy's board of directors. CSAS shall, however, submit the final lease to the board of directors for approval or ratification at the first available meeting after such equipment has been made available.

ARTICLE VIII

TERMINATION OF AGREEMENT

A. **Termination by CSAS.** CSAS may terminate this Agreement with cause prior to the end of the term specified in Article II in the event the Academy fails to remedy a material breach within sixty (60) days after notice from CSAS. A material breach may include, but is not limited to, failure to make payments to CSAS as required by this Agreement. CSAS may also terminate this Agreement if the Academy makes decisions regarding the personnel, curriculum or program inconsistent with the recommendations of CSAS.

B. **Termination by the Academy.** The Academy may terminate this Agreement with cause prior to the end of the term in the event that CSAS should fail to remedy a material breach within sixty (60) days after notice from the Academy. Material breach may include, but is not limited to, failure to account for its expenditures or to pay operating costs (provided funds are available to do so); or the failure to follow the policies, procedures, rules, regulations or curriculum as adopted by the Academy; or the receipt by the Board of unsatisfactory reports from CSAS or DOE about matters which are not adequately corrected or explained.

C. **Deficiency in Performance.** If, after one year, the Academy makes a good faith reasonable determination that CSAS has been deficient in the performance of its obligations under the agreement, including falling short of the performance standards specified in this Agreement, or if DOE revokes the Contract with the Academy where such revocation is due to CSAS' failure to abide by the educational goals set forth in the Contract, CSAS' failure to comply with applicable law, or CSAS' failure to meet generally accepted accounting principles, then the Academy must advise CSAS and allow CSAS a reasonable period in which to remedy such failures. If the

Academy makes a good faith reasonable determination that CSAS' remedial action is unsatisfactory, the Academy may terminate the agreement upon notice appropriate to the circumstances.

D. Change in Law. If any federal, state or local law or regulation, or court decision has a material adverse impact on the ability of either party to carry out its obligations under this Agreement, then either party, upon written notice, may request renegotiations of the agreement; and if the parties are unable or unwilling to renegotiate the terms within 90 days after the notice, the party requiring the renegotiation may terminate this Agreement on 120 days' further written notice.

E. Cessation of State Funding. The parties anticipate that the primary source of revenue for the operation of the Academy will be state school aid payments, for which the Academy will be eligible as an open-enrollment charter school. If, for whatever reason, the state amends the Code such that charter schools are no longer eligible for state school aid payments or the state ceases funding for charter schools, then this Agreement may be terminated by either party with 90 days written notice.

F. Effective Date of Termination. In the event this Agreement is terminated by either party prior to the end of the term specified in Article II, absent unusual and compelling circumstances the termination will not become effective until the end of the academic year following the notice of termination.

G. Property and Equipment upon Expiration or Termination. Upon expiration of this Agreement at the completion of the contract term and where there is no renewal, or upon termination of this Agreement for any reason, CSAS shall have the right to reclaim any usable property or equipment it installed or provided at or to the Academy at its expense or the depreciated cost of such equipment. Fixtures and building alterations shall become the property of the Academy.

H. Transition. In the event of termination of this Agreement for any reason by either party prior to the end of the Agreement's term, CSAS shall provide the Academy reasonable assistance for up to 90 days to assist in the transition to an alternative school program.

ARTICLE IX

PROPRIETARY INFORMATION

A. Proprietary Information. The Academy agrees that CSAS shall own all copyright and other proprietary rights to all instructional materials, training materials, curriculum and lesson plans, and any other materials developed by CSAS, its employees, agents or subcontractors, or by any individual working for or supervised by CSAS, which is developed during working hours or during time for which the individual is being paid. CSAS shall have the sole and exclusive right to license such materials for use by other school districts, charter schools, private schools, or customers or to modify and/or sell such material to other schools and customers. During the term of this Agreement, CSAS may disclose such proprietary information, including that which is currently in existence as well as that which may be created in the future. The Academy shall treat all such proprietary information as though it were a trade secret and copyrighted, and shall use efforts as may be reasonably requested by CSAS so as not to disclose, publish, copy, transmit, modify, alter or utilize such proprietary information during the term of this Agreement or at any time after its expiration other than to the extent necessary for implementation of this Agreement. The Academy shall use such efforts as may be reasonably requested by CSAS to assure that no Academy personnel or agent disclose, publish, copy, transmit, modify, alter or utilize CSAS' proprietary information.

B. Required Disclosure. The Academy shall be permitted to report any new teaching techniques or methods or significant revisions to known teaching techniques or methods to DOE,

which teaching techniques or methods may thereafter be made available to the public, to the extent required in the Code, notwithstanding anything contained in this Article IX to the contrary.

ARTICLE X

INDEMNIFICATION

A. **Indemnification of CSAS.** The Academy shall indemnify and save and hold CSAS and all of its employees, officers, directors, subcontractors and agents (collectively, "employees") harmless against any and all claims, demands, suits or other forms of liability that may arise out of, or by reason of, any action taken or not taken by CSAS or any of its employees in the event of any claim that this Agreement or any part thereof is in violation of law; any noncompliance by the Academy with any agreements, covenants, warranties or undertakings of the Academy contained in or made pursuant to this Agreement; and any misrepresentation or breach of the representations and warranties of the Board contained in or made pursuant to this Agreement. In addition, the Academy shall reimburse CSAS for any and all legal expenses and costs associated with the defense of any such claim, demand or suit.

B. **Inability to Open School.** Should either party fail to perform the obligations of this Agreement prior to the beginning of the first academic year contemplated under this Agreement, it shall hold the other harmless for the reasonable expenses incurred by that party in preparing for the opening of school operations, provided that such other party has substantially fulfilled all its obligations necessary to the performance, including but not limited to securing such waivers as may be necessary for CSAS to begin operations and approving CSAS' recommendation for selection of the Academy's school personnel.

C. **Indemnification for Negligence.** Each party to this Agreement shall indemnify and hold harmless the other, and their respective boards of directors, partners, officers, employees,

agents and representatives, from any and all claims and liabilities which they may incur and which arise solely out of the negligence of the other party, or the negligence of the party's trustees, directors, officers, employees, agents or representatives. Such indemnification may be achieved by the joint purchase of general liability and property insurance policies, or by such other means as the parties may mutually agree.

ARTICLE XI

INSURANCE

CSAS shall secure and maintain the normal general liability and umbrella insurance coverage. However, the building and related capital facilities remain the property of the Academy and the Academy shall cover its property with insurance. The Academy shall also maintain such insurance as shall be necessary to indemnify CSAS as provided in this Agreement. Each party shall, upon request, present evidence to the other that it maintains the requisite insurance compliance with the provisions of this paragraph. CSAS shall comply with any information or reporting requirements applicable to the Academy under the Academy's policy with its insurer(s), to the extent practicable.

ARTICLE XII

WARRANTIES, REPRESENTATIONS AND CONVENANTS

A. **Academy Warranties and Representations.** The Academy represents that it has the authority under law to execute, deliver and perform this Agreement and to incur the obligations provided for under this Agreement. The Board warrants that its actions have been duly and validly authorized, and that it will adopt any and all resolutions or expenditure approvals required for execution of this Agreement.

B. Mutual Warranties. The Academy and CSAS mutually warrants to the other that there are no pending actions, claims, suits or proceedings, to its knowledge, threatened or reasonably anticipated against or affecting it, which if adversely determined, would have a materials adverse affect on its ability to perform its obligations under this Agreement.

ARTICLE XIII

ALTERNATIVE DISPUTE RESOLUTION PROCEDURE

Any and all disputes between the parties, concerning any alleged breach of this Agreement, or arising out of or relating to the interpretation of this Agreement or the parties' performance of their respective obligations under this Agreement, shall be resolved by arbitration, and such procedure shall be the sole and exclusive remedy for such matters. Unless the parties agree upon a single arbitrator, the arbitration panel shall consist of three persons, including one person who selected or recommended by DOE. The arbitration shall be conducted in accordance with the rules of the American Arbitration Association, with such variations as the parties and arbitrator unanimously accept. A judgment on the award rendered by the arbitrators may be entered in any court having appropriate jurisdiction.

ARTICLE XIV

MISCELLANEOUS

A. Sole Agreement. This Agreement supersedes and replaces any and all prior agreements and understandings between the Academy and CSAS.

B. Force Majeure. Neither party shall be liable if the performance of any part or all of this Agreement is prevented, delayed, hindered or otherwise made impracticable or impossible by reason of any strike, flood, riot, fire, explosion, war, act of God.

C. **Notices.** All notices, demands, requests and consents under this Agreement shall be in writing, shall be delivered to each party and shall be effective when received by the parties or mailed to the parties at their respective addresses set forth below, or at such other address as may be furnished by a party to the other party:

If to CSAS: Charter School Administration Services, Inc.
20755 Greenfield, Suite 300
Southfield, Michigan 48075
Attention: Leicester L. Allen

If to Academy: Academy of Dover
20755 Greenfield, Suite 300
Southfield, Michigan 48075
Attention: President

D. **Severability.** The invalidity of any of the covenants, phrases or clauses in this Agreement shall not affect the remaining portions of this Agreement, and this Agreement shall be construed as if such invalid covenant, phrase or clause had not been contained in this Agreement.

E. **Successors and Assigns.** This Agreement shall be binding upon, and inure to the benefit of, the parties and their respective successors and assigns.

F. **Entire Agreement.** This Agreement is the entire agreement between the parties relating to the services provided, and the compensation for such services, by the parties.

G. **Non-Waiver.** No failure of a party in exercising any right, power or privilege under this Agreement shall affect such right, power or privilege, nor shall any single or partial exercise thereof preclude any further exercise thereof or the exercise of any other right, power or privilege. The rights and remedies of the parties under this Agreement are cumulative and not exclusive of any rights or remedies which any of them may otherwise have.

H. **Assignment.** Neither this Agreement nor any part of it may be assigned by either party without the prior written consent of the other party.

I. **Governing Law.** This Agreement shall be governed by and enforced in accordance with the laws of the State of Michigan.

The parties have executed this Agreement as of the day and year first above written.

Charter School Administration Services, Inc. **Academy of Dover**

By: Leicester L. Allen
Leicester L. Allen
President

By: Ludwig J. Cappadocia
President

Resolutions of the Board of Directors

**Academy of Dover
Resolutions of the Board of Directors
And Consent of the Member**

The undersigned, as the president of Academy of Dover, a Delaware nonprofit corporation (the "Corporation"), and, as president of Academy of America, a Michigan nonprofit corporation (the "Member"), the sole member of the Corporation, certifies that the board of directors of the Corporation and of the Member unanimously adopted the resolutions set forth below.

1. Bylaws. The attached bylaws shall be the bylaws of the Corporation.
2. Directors. The articles of incorporation filed with the State of Delaware named the following persons to the board of directors:

Lecester L. Allen
David K. McDonnell
Mattie L. Allen
Dana Allen
Aaron Allen
Nathalia Brooks

Each of these directors resigns as a member of the board of directors, and the following persons shall constitute the board of directors of the corporation:

Alisa Armstead, 218 North Queen, Dover, Delaware 19904
Ruby Coppadge, 943 Jawd Drive, Dover, Delaware 19901
Edward Minus, Sr., 37 McKee Road, Dover, Delaware 19904
Jana Yancy, 452 Fulton, Dover, Delaware 19901

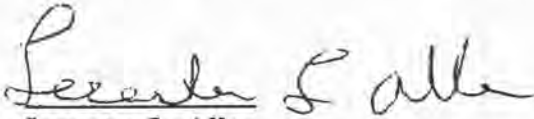
The member of the corporation shall continue efforts to recruit an additional member to the board, such that the board of directors of the corporation shall consist of at least five directors, each of whom are residents of the State of Delaware.

2. Officers. The articles of incorporation filed with the State of Delaware named the following persons as officers of the corporation


<u>person</u>	<u>office</u>
Lecester L. Allen	President
Mattie L. Allen	Secretary & Treasurer
David K. McDonnell	Vice-President

Such persons shall continue to serve as officers of the corporation until the next meeting of the board of directors, at which time the newly constituted board of directors shall elect new officers.

3. Ratification of Prior Actions. All actions previously taken by the incorporators and the officers of the Corporation, including, but not necessarily limited to, the filing of the articles of incorporation, are hereby ratified and approved.
4. Authorization. Any officer of the Corporation is authorized to sign (when necessary) and deliver the documents referred to in these resolutions and to perform all other acts and obligations contemplated in the documents.



Leicester L. Allen
President,
Academy of Dover



Leicester L. Allen
President,
Academy of America

Dated: March 6, 2000

By-laws



BYLAWS
OF
ACADEMY OF DOVER

ARTICLE I

NAME

The name of the corporation shall be "Academy of Dover".

ARTICLE II

INCORPORATION

Section 1: Non-profit corporation: The corporation shall be incorporated as a non-profit corporation under Title 8 of the Delaware Code (the "Corporations Code").

Section 2: Membership corporation and conversion to directorship corporation: Initially, the corporation shall be organized as a membership corporation, as provided in Article V. The corporation may thereafter be converted into a directorship corporation, as further provided in Article V.

Section 3: Tax exempt status: The corporation shall apply for tax-exempt status under §501(c)(3) of the Internal Revenue Code ("IRC"). The corporation may, prior to submitting such application, operate as a tax-exempt "subordinate organization" under the general supervision or control of the member (as defined in Article V), under the procedure provided for in Rev. Proc. 80-27, 1980-1 C.B. 677.

ARTICLE III

OFFICES

Section 1: Principal office: The principal office of the corporation shall be located in the City of Southfield, Oakland County, State of Michigan, or at such other location as the board of directors shall determine from time to time.

Section 2: Registered office and agent: The registered office of the corporation shall be located in the State of Delaware, and be the business office of the registered agent, as required by the Corporations Code.

ARTICLE IV

OBJECTIVES

Section 1: Educational objectives: The corporation shall have as its exclusive objection, the following educational purposes:

to create, establish and operate a "charter school", as such term is defined in Title 14 "Education", Part I "Free Public Schools, Chapter 5 "Charter Schools" of the Delaware Code (the "Charter School Code"),

to create, establish and operate an accredited school and provide for the education of students in grades pre-kindergarten through twelfth grade,

to provide classroom instruction for its students and such nonclassroom instruction, including but not limited to seminars, public forums, field trips, cooperative job training, as the board of directors shall authorize for the education of its students,

to foster quality of opportunity for students by promoting their continued growth and development, their self-respect, their self-confidence and their usefulness, by encouraging their participation in a wide variety of curricular and extra curricular activities and by seeking recognition of their potential,

to provide an accredited program to primary and secondary education and to confer high school diplomas to its graduates,

to lease or own and operate a school facility in Dover, Delaware, or at such other location as the board of directors shall determine,

to employ and train sufficient staff to provide instruction to students,

to establish policies, plans and procedures for the implementation and administration of the designated purposes, and

to fulfill such other purposes and functions, consistent with the Corporations Code and the Charter School Code, as the board of directors shall determine from time to time.

The organization shall engage directly in the support of such purposes and may make distributions to other organizations that qualify as exempt organizations under IRC § 501(c)(3), for use by the distributees in support of such purposes.

Section 2: Net earnings: No part of the net earnings of the corporation shall inure to the benefit of, or be distributable to its directors, officers, or other private persons, except that the corporation shall be authorized and empowered to pay reasonable compensation for services

rendered and to make payments and distributions in furtherance of the purposes set forth in Section 1 of this Article.

Section 3: Political activities prohibited: No substantial part of the activities of the corporation shall be the carrying on of propaganda, or otherwise attempting to influence legislation, and the corporation shall not participate in, or intervene in (including the publishing or distribution of statements) any political campaign on behalf of any candidate for public office.

Section 4: Discrimination prohibited: The corporation shall not, in the operation of its activities in fulfillment of its corporate purposes, discriminate against students or applicants on the basis of race, color, religion, national origin or sex.

Section 5: Inconsistent activities prohibited: Notwithstanding any other provision of these bylaws, the corporation shall not carry on any other activities not permitted to be carried on (a) by a corporation exempt from federal income tax under IRC §501(c)(3), or (b) by a corporation, contributions to which are deductible under IRC §170(c)(2).

ARTICLE V

MEMBERSHIP, VOTING AND MEETINGS

Section 1: The member: The corporation shall be organized as a membership corporation. The sole member of the corporation shall be Academy of America, a Michigan non-profit corporation (the "member"). No other person or entity shall be entitled to membership.

Section 2: Voting: The member shall be entitled to one vote, and the sole vote, on all matters requiring a vote of the members. The member's vote may be cast in person, by an officer of the member, or by proxy.

Section 3: Membership meeting: The corporation shall conduct an annual meeting of the member, at a date and time selected by resolution of the board of directors. The president, a majority of the directors of the board, or the member may call special meetings of the member. The annual or any special meeting may be held in Delaware, Michigan, or at such other location as selected by the board of directors, with the consent of the member. At least 10 days, but not more than 60 days, before an annual meeting or a special meeting of member, written notice of the time, place, and purpose of the meeting shall be mailed to the member entitled to vote at the meeting. At least 20 days' written notice shall be provided to the member of any proposed amendment to these bylaws.

Section 4: Directorship corporation: The corporation may be converted from a membership corporation to a directorship corporation, upon resolution of the board of directors and consent of the member. Upon such resolution and consent, this Article shall no longer have any force or effect.

ARTICLE V

BOARD OF DIRECTORS

Section 1: Management of corporation: The corporation shall be managed by its board of directors. The board of directors may exercise any and all of the powers granted to it under the Corporations Code or pursuant to the Charter School Code. The board may delegate such powers as it deems necessary and to the extent authorized by law.

Section 2: Number of directors: The number of directors shall be not less than three (3), nor more than nine (9). The number of initial directors, and the selection of the initial directors, shall be determined by resolution of the member. Thereafter, the number of directors shall be determined by resolution of the board.

Section 3: Term of directors: The directors shall serve for a three (3) year term, or until resignation or removal. The directors shall be divided into three (3) classes, each to be as nearly equal as possible, with terms of office such that the terms of the directors in the first class will expire at the first annual meeting following their election, the terms of the second class will expire at the second annual meeting after their election, and the terms of the third class will expire at the third annual meeting after their election. At each annual meeting after such a classification of the board of directors, a number of directors equal to the number of the class whose term is expiring shall be elected to hold office until the third succeeding annual meeting.

Section 4: Qualifications: The initial board of directors shall be selected as provided in Section 2. Thereafter, the members of the board shall include at least one parent or guardian of a child attending the school operated by the corporation, at least one professional educator, preferably a person with school administrative experience, and other representatives from the community, business and industry. Directors need not be residents of the State of Delaware, except to the extent required under the Corporations Code or the Education Code.

Section 5: Meetings: The board of directors shall hold an annual meeting and at least five regular meetings each year. The date and time of the annual and regular meetings shall be established by resolution of the board of directors. Special meetings of the board of directors may be called by or at the request of the president or any two directors.

Section 6: Open meetings: From and after the issuance of a charter to the corporation, permitting its operation of a charter school, and so long as such charter remains in effect, every annual, regular, or special meeting of the board of directors shall be open to the public, except as provided in the Delaware Freedom of Information Act, 29 Del. C. §10001, *et. seq.* ("FOIA"). Notice of the time and place of any meeting shall be given, and a record of the meeting shall be taken, in the manner provided in FOIA. No members of the board of directors shall conduct a "meeting", as such term is defined in FOIA, except as provided in FOIA. Members of the board of directors may participate in an open or closed meeting of the board by telephone conference call or video conference to the extent, and under the procedure, authorized in FOIA.

Section 7: Quorum: A majority of the board of directors shall constitute a quorum for the transaction of business at any meeting of the board.

Section 8: Action of the board: The act of a majority of the directors present at a meeting at which a quorum is present shall be the act of the board of directors.

Section 9: Vacancies: Any vacancy occurring in the board of directors and any increase to be filled by reason of an increase in the number of directors shall be selected by the member, so long as it is a member, and thereafter may be filled by the affirmative vote of a majority of the remaining directors, even if less than a quorum of the board of directors. The member or the board of directors, as the case may be, shall determine the term of each new director, consistent with Section 3 of this Article.

Section 10: Removal: Any director may be removed, with or without cause, by the affirmative vote of the member, so long as it is a member, and thereafter by a two-thirds (2/3rds) vote of the remaining directors.

Section 11: Management company: The board may employ for the corporation a management company or managing agent, at a compensation rate established by the board, to perform duties and services authorized by the board. A member of the board, or any person or entity affiliated or related to a member of the board or of the member, may serve as managing agent if the board appoints the party, subject to the requirements and limitations set forth in Section 6 of Article X of these bylaws.

Section 12: Presumption of assent: A director of the corporation who is present at a meeting of the board of directors at which action on any corporate matter is taken shall be presumed to have assented to the action taken unless that director's dissent shall be entered in the minutes of the meeting or unless that director shall file a written dissent to such action with the person acting as the secretary of the meeting before its adjournment or shall forward such dissent by registered mail to the secretary of the corporation immediately after the adjournment of the meeting. This right to dissent shall not apply to a director who voted in favor of such action.

Section 13: Director's duties: A director shall discharge the director's duties, including the director's duties as a member of a committee, in good faith, with ordinary care, and in a manner the director reasonably believes to be in the best interest of the corporation. In the discharge of any duty imposed or power conferred on a director, including as a member of a committee, the director may in good faith rely on information, opinions, reports, or statements, including financial statements and other financial data, concerning the corporation or another person that were prepared or presented by:

- a. one or more officers or employees of the corporation;
- b. legal counsel, public accountants, or other persons as to matters the director reasonably believes are within the person's professional or expert competence; or

- c. a committee of the board of directors of which the director is not a member.

A director is not relying in good faith, within the meaning of this section, if the director has knowledge concerning a matter in question that makes reliance otherwise permitted by this section unwarranted. A director is not liable to the corporation, any member, or any other person for any action taken or not taken as a director if the director acted in compliance with this section. A person seeking to establish liability of a director must prove that the director has not acted:

- a. in good faith;
- b. with ordinary care; and
- c. in a manner the director reasonably believes to be in the best interest of the corporation.

ARTICLE VI

OFFICERS

Section 1: Officers: The officers of the corporation shall be president; zero, one or more vice presidents (the number thereof to be determined by the board of directors); a secretary; a treasurer; and such other officers as may be elected in accordance with the provisions of this Article. The board of directors may elect or appoint any other officers as it shall deem desirable, such officers to have the authority and perform the duties prescribed, from time to time, by the board of directors. Any two or more offices may be held by the same person, except the offices of president and secretary.

Section 2: Election: The officers of the corporation shall be elected annually by the board of directors at a regular meeting of the board of directors. New offices may be created and filled at any meeting of the board of directors. The officers may, but need not, be members of the board of directors.

Section 3: Removal: Any officer elected or appointed by the board of directors may be removed by the board of directors, at any time, with or without cause.

Section 4: Vacancies: A vacancy in any office because of death, resignation, removal, disqualification or otherwise, may be filled by the board of directors.

Section 5: President: The president shall be the principal executive officer of the corporation and shall in general supervise and control all of the business and affairs of the corporation. He shall preside at all meetings of the board of directors. He or she may sign, with the secretary or any other proper officer of the corporation authorized by the board of directors, any deeds, mortgages, bonds, contracts, or other instruments in which the board of directors has authorized to be executed, except

in cases where the signing and execution shall be expressly delegated by the board of directors or by these bylaws or by statute to some other officer or agent of the corporation; and in general he or she shall perform all duties incident to the office of president and such other duties as may be prescribed by the board of directors from time to time.

Section 6: Vice president(s): In the absence of the president or in event of his or her inability or refusal to act, the vice president (or in the event there be more than one vice president, the vice president in the order of their election or in their designation of authority) shall perform the duties of the president, and when so acting, shall have all other powers of and be subject to all the restrictions upon the president. Any vice president shall perform such other duties as from time to time may be assigned to him or her by the president or by the board of directors.

Section 7: Treasurer: The treasurer shall have charge and custody of and be responsible for all funds and securities of the corporation, receive and give receipts for moneys due and payable to the corporation from any source whatsoever, and deposit all such moneys in the name of the corporation in such banks, trust companies or other depositories as shall be selected in accordance with the provisions of these bylaws; and in general perform all the duties incident to the office of treasurer and such other duties as from time to time may be assigned to him or her by the president or by the board of directors. If required by the board of directors, the treasurer shall give a bond for the faithful discharge of his or her duties in such sum and with such surety or sureties as the board of directors shall determine.

Section 8: Secretary: The secretary shall keep the minutes of the meeting of the board of directors in one or more books provided for that purpose; see that all notices are duly given in accordance with the provisions of these bylaws or as required by law, including, but not limited to, FOIA; be custodian of the corporate records, keep a register of the post-office address of each director which shall be furnished to the secretary by such member; and in general perform all duties incident to the office of secretary and such other duties as from time to time may be assigned to him or her by the president or by the board of directors.

ARTICLE VII

COMMITTEES

Section 1: Executive committees: The board of directors, by resolution adopted by a majority of the directors in office, may designate and appoint an executive committee, which shall consist of one or more directors, which committee, to the extent provided in such resolution, shall have and exercise the authority of the board of directors in the management of the corporation, except that no such committee shall have the authority of the board of directors in reference to amending, altering or repealing the bylaws; electing, appointing or removing any member of any such committee or any director or officer of the corporation; amending the articles of incorporation; restating articles of incorporation; adopting a plan of merger or adopting a plan of consolidation with another corporation; authorizing the sale, lease, exchange or mortgage of all or substantially all of the property or assets of the corporation; authorizing the voluntary dissolution of the corporation or

revoking proceedings thereafter; adopting a plan for the distribution of the assets of the corporation; or amending, altering or repealing any resolution of the board of directors which by its terms provides that it shall not be amended, altered or repealed by such committee. The designation and appointment of any such committee and the delegation of authority to such committee shall not operate to relieve the board of directors, or any individual director, of any responsibility imposed upon it or him or her by law.

Section 2: Other committees: Other committees not having and exercising the authority of the board of directors in the management of the corporation may be appointed in such manner as may be designated at a meeting at which a quorum is present, and may consist of one or more directors or others. Any committee member may be removed, at any time with or without cause, by the person or persons authorized to appoint such member.

Section 3: Appointment: The members of an executive committee established pursuant to Section 1 shall be selected by a majority of the board of directors. The members of any other committee shall be selected by the president; or, at the option of the president, the chair of a committee may be selected by the president, with the authority to select committee members delegated to the committee chair.

Section 4: Vacancies: Vacancies in the membership of any committee may be filled by appointments made in the same manner as provided in the case of the original appointments.

Section 5: Quorum: Unless otherwise provided in the resolution of the board of directors designating a committee, majority of the whole committee shall constitute a quorum and the act of a majority of the members present at a meeting at which a quorum is present shall be the act of the committee.

Section 6: Procedures: Each committee may adopt rules for its own government not inconsistent with these bylaws or with rules adopted by the board of directors.

Section 7: Open meetings: Every meeting of a committee shall be open to the public to the extent required under FOIA.

ARTICLE VIII

ADVISORY BOARD

Section 1: Advisory board: The board of directors, by resolution adopted by a majority of the directors, shall designate and appoint an advisory board, which shall include one or more parents or guardians of students at the school operated by the corporation, one or more professional educators, and one or more representatives of the business community and community at large. The advisory board shall reflect the school's ethnic composition to the extent possible. The board of directors may appoint or remove members of the advisory board at its sole discretion.

Section 2: Duration: The initial board of directors shall appoint and maintain an advisory board so long as the member remains a member of the corporation. Upon the conversion of the corporation to a directorship corporation, the continual maintenance of an advisory board shall be within the discretion of the board of directors.

Section 3: Purpose: The purpose of an advisory board shall be to provide the board of directors and the officers of the corporation with independent advise and guidance relating to the administration of the school and matters incidental to such administration.

ARTICLE IX

COMPENSATION AND INDEMNIFICATION

Section 1: Director's compensation: Directors, as such, shall not receive any stated salaries for their services, but, by resolution, the board of directors may allow a fixed sum and expenses, if any, for attendance at each meeting of the board. Notwithstanding anything contained in these bylaws to the contrary, and to the extent permitted by law, a director may serve the corporation in any other capacity and receive compensation in such capacity.

Section 2: Officer's compensation: The compensation of all officers shall be fixed by the board of directors or a committee of the board of directors. The compensation of other employees shall be fixed by the president, or by a school administrator or principal granted such authority by the board of directors, subject to any limitations prescribed by the board of directors.

Section 3: Indemnification: The corporation shall indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceedings, whether civil, criminal, administrative or investigate (other than an action by or in the right of the corporation) by reason of the fact that he or she is or was a director, officer, employee or agent of the corporation, including a member of a committee or advisory board of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with such action, suit or proceeding, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. This indemnification shall be to the fullest extent authorized or permitted under the Corporations Code or other applicable law, and shall be subject to the limitations, restrictions, and conditions for indemnification set forth in the Corporations Code.

The indemnification provided by this section shall not be deemed exclusive of any other rights to which any person seeking indemnification may be entitled under any bylaws, agreement, statute, court decision or otherwise, nor or hereafter in effect, both as to action in his or her official capacity, and as to action in another capacity while holding such office, and shall continue to a

person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs, executors and administrators of such a person.

Expenses incurred in defending a civil or criminal action, suit, or proceeding described in this section may be paid by the corporation in advance of the final disposition of the action, suit, or proceeding as authorized by the board of directors on receipt of an undertaking by or on behalf of the director, an officer, an employee, or an agent to repay the amount unless it is ultimately determined that the party is entitled to be indemnified by the corporation as authorized in this section.

Section 4: Insurance: The corporation may purchase and maintain insurance on behalf of any person who is serving the corporation in any capacity, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him or her and incurred by him or her in any such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify him or her against such liability under the provision of this Article or of the Corporations Code.

Section 5: Fidelity loss: The treasurer, at the director of the board of directors, shall arrange for and maintain on behalf of the corporation insurance or other suitable protection against fidelity losses and against such other losses as the board of directors may deem appropriate.

ARTICLE X

CONTRACTS, CHECKS, DEPOSITS AND FUNDS

Section 1: Contracts: The board of directors may authorize any officer or officers, agent or agents of the corporation, in addition to the officers so authorized by these bylaws, to enter into any contract or execute and deliver any instrument in the name of and on behalf of the corporation, and such authority may be general or confined to specific instances.

Section 2: Checks, etc.: All checks, drafts or orders for the payment of money, notes or other evidence of indebtedness issues in the name of the corporation, shall be signed by such officer or officers, agent or agents of the corporation and in such manner as shall from time to time be determined by resolution of the board of directors. In the absence of such determination by the board of directors, such instruments shall be signed by the treasurer or the president of the corporation.

Section 3: Corporate funds: All funds of the corporation shall be deposited from time to time to the credit of the corporation in such banks, trust companies or other depositories as the board of directors may select.

Section 4: Loans: No loans shall be contracted on behalf of the corporation and no evidences of indebtedness shall be issued in its name unless authorized by a resolution of the board of

directors. Such authority may be general or confined to specific instances. No loan, advance, overdraft or withdrawal by an officer or director of the corporation, other than in the ordinary and usual course of the business of the corporation, shall be made or permitted. Any authorization for a borrowing may be general or confined to specific instances, and may include authorization to pledge, as security for borrowing so authorized any and all securities and other real or personal property, or both, at any time held by the corporation.

Section 5: Donations: The board of directors may accept on behalf of the corporation any contribution, gift, bequest or devise for the general purposes or for any special purpose of the corporation.

Section 6: Conflicts: A contract or transaction between the corporation and one or more of its directors, officers, or member, or between the corporation and any other corporation, partnership, association, or other organization in which one or more of its directors, officers, or member are directors, officers, or members, or have a financial interest, is not void or voidable solely for that reason, solely because the director, officer, or member is present at or participates in the meeting of the board or committee of the board or of the members that authorizes the contract or transaction, or solely because the director's, officer's, or member's votes are counted for that purpose, if:

- a. the material facts as to the relationship or interest and as to the contract or transaction are disclosed or are known to the board of directors, the committee, or the member, and the board, committee, or member in good faith and with ordinary care authorizes the contract or transaction by the affirmative vote of a majority of the disinterested directors or member, even though the disinterested directors or members are less than a quorum; or
- b. the contract or transaction is fair to the corporation when it is authorized, approved, or ratified by the board of directors, a committee of the board, or the member.

Common or interested directors or member may be counted in determining the presence of a quorum at a meeting of the board of directors, of a committee, or of the member that authorizes the contract or transaction. Except as provided above, the directors, officers and member of the corporation may be interested directly or indirectly in any contract relating to or incidental to the operations conducted by the corporation, and may freely make contracts, enter transactions, or otherwise act for or on behalf of the corporation, notwithstanding that they may also be acting as individuals, or as directors of trusts, or as agents for other persons or corporations, or may be interest in the same matters as shareholders, directors or otherwise, provided, however, in which the directors, officers, or member are personally interested as shareholders, director or otherwise shall be at arm's length and not violative of the prescription in the articles of incorporation, these bylaws, or the Corporations Code against the corporation's use or application of its funds for private benefits.

ARTICLE XI

BOOKS AND RECORDS

Section 1: Books and records: The corporation shall keep correct and complete books and records of account and shall also keep minutes of the proceedings of the board of directors and committees having any of the authority of the board of directors. All books and records of the corporation may be inspected by any director, or his or her agent or attorney, for the proper purpose of any reasonable time.

Section 2: Financial accounting: The corporation shall use financial accounting practices consistent with the Delaware financial accounting manual; shall obtain an annual audit of its financial affairs by a certified public accountant; and shall, in all respects, comply with the financial accounting requirements imposed under the Corporations Code and the Education Code.

Section 3: Public records: All "public records", as such term is defined in FOIA, shall be collected, assembled, maintained, preserved or destroyed, withheld or disclosed or otherwise made available to the public, all as provided in such chapter.

ARTICLE XII

COMPLIANCE AND INTERPRETATION

Section 1: Compliance: The corporation shall at all times operate in compliance with the requirements imposed under the Corporations Code, the Charter School Code, IRC, and other applicable laws relating to a non-profit, tax-exempt corporation operating an open-enrollment charter school. The corporation shall further operate at all times in compliance with the charter granted to it to operate an open-enrollment charter school under the Charter School Code.

Section 2: Interpretation: These bylaws, and any resolution subsequently adopted by the board of directors or the member, shall be interpreted consistent with the requirements of Section 1 of this Article.

ARTICLE XIII

PLAN OF LIQUIDATION OR DISTRIBUTION

A plan providing for the distribution of assets, not inconsistent with the provisions of these bylaws or the Corporations Code, may be adopted by the corporation in the process of dissolution and shall be adopted by the corporation for the purpose of authorizing any transfer or conveyance of assets for which the Corporations Code requires a plan of distribution, in the following manner:

- a. So long as the member is a member of the corporation, the board of directors shall adopt a resolution recommending a plan of distribution and directing the submission of the plan for approval of the member. Written or printed notice setting forth the proposed plan of distribution or a summary of the plan shall be given to the member, within the time and in the manner provided in the Corporations Code for the giving of notice of meetings of members. A plan of distribution may provide for the distribution of the assets of the corporation to the member. Such plan of distribution shall be adopted only if approved by the member.
- b. If the member is no longer a member of the corporation, a plan of distribution shall be adopted at a meeting of the board of directors upon receiving the vote of a majority of the directors in office.

ARTICLE XIV

FISCAL YEAR

The fiscal year shall be September 1st to August 31st.

ARTICLE XV

AMENDMENTS

Section 1: Approval by board of directors: Subject to the limitations set forth in Section 2, below, amendments to these bylaws shall be adopted by a majority of the board of directors, at any regular or special meeting, the proposed amendment having been submitted to all directors, in writing, at least 15 days prior to such meeting.

Section 2: Approval by the member: So long as the member remains a member of the corporation, no amendment to these bylaws shall be effective unless such amendment has been approved by a resolution of the member.

ARTICLE XVI

SEVERABILITY

If any of the provisions of these bylaws are held to be partially or wholly invalid or unenforceable for any reason, that holding shall not affect, alter, or impair any of the other provisions of these bylaws or the remaining part of any provision that is held to be partially invalid

or unenforceable. In such an event, these bylaws shall be construed as if the invalid or unenforceable provisions were omitted.

ARTICLE XII

SEAL

The corporation shall have no seal.

* * * * *

Adopted by the sole Member and by the Board of Directors on _____, 1999.

The Signature Page

The Board of Directors of this charter school assure that, the school will do the following:

- 1) Not discriminate against any student in the admissions process because of race, creed, color, sex, handicap, or national origin or because of a student's school district of residence has a per student local expenditure lower than another student seeking admission.
- 2) Not operate in a sectarian manner or include religious practices in its educational program.
- 3) Participate in the State Assessment Program and meet the requirements for school accountability as described in the Accountability Act of 1998.
- 4) Manage the school within all state administrative and financial systems listed in Del. C., Title 14, Section 512(9), or if the school plans to operate outside of any listed system it has been specifically noted in this application and the applicant has submitted a formal request to the State Budget Office to initiate a Memorandum of Understanding as described in Del. C., Title 14, Section 512(9).
- 5) Maintain direct communication with other public and nonpublic schools to assure efficient notification and transfers and exchange of records.
- 6) Update the application to incorporate any modifications and/or conditions identified as pre-conditions to final approval by the Secretary of Education and State Board of Education as set forth in its written decisions and order; and operate the program in accordance with the content of the updated and approved charter granted by the State Board. The school's board of directors may not implement any additional modifications to the charter school program or operation without the express written consent of the Department of Education.
- 7) Notify the Department of Education in writing within 30 days when the administrative head or members of the board of directors change.
- 8) Provide the Department of Education with copies of the policies and by-laws of the school and the school's board of directors and inform the Department when by-laws change.
- 9) Before September 1 of each school year, provide the Department of Education with evidence of the certification status of teachers employed at the school.

- 10) Employ only staff who have complied with the requirement of having a successful criminal background check and report to the Department of Education by September 1 of each school year that the school is in full compliance with state law related to this requirement.
- 11) Cooperate fully with Department of Education requests for reporting information and activities related to monitoring the school's compliance with the charter and applicable state and federal laws and regulations.
- 12) Comply with the provisions for a Performance Agreement, as required by the Secretary of Education.
- 13) Distribute copies of the Department's **Parent Guide to Delaware Charter Schools** to parents seeking to enroll their child(ren) as well as to parents of enrolled children.
- 14) Conduct all meetings of the board of directors in a manner consistent with the Freedom of Information Act, especially the legal requirements of Del. C. Title 29, Sections 10002, 10003 and 10004.
- 15) Prior to opening the school, include representation of the teachers employed the school and parents of students enrolled at the school on the board of directors, consistent with Del. C., Title 14, Section 511(a).

On behalf of the Board of Directors of this Charter School, I agree to these assurances as a condition of the approval of the charter.

Academy of Dover Charter School

Name of the Charter School



Signature of the Chairperson of the Charter School Board of Directors

Ruby Coppadge

Name of the Signer (type or print)

March 10, 2000

Date of Signature

Appendix A
Curriculum Alignment
Entrepreneurial

C

O

O

The following is an explanation of the alignment between the Delaware's Content Standards and the Academy of Dover's Core Curriculum.

K-8 Curriculum Alignment Mathematics

Standard 1: Estimation, Measurement and Computation

All students will develop an understanding of Estimation, Measurement and Computation by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results. DEL-M5

Strand: Estimation, Measurement and Computation

Late Elementary 4-5

By the end of the fifth grade students will be able to:

1. **Estimate, make and use measurements (U.S. customary and metric) to describe and make comparisons. M5.40**
 - PO1. Measure length, volume and weight in both U.S. customary and metric units.
 - PO2. Convert measurement units to equivalent units within a given system (customary and metric).
 - PO3. Estimate measurements for both U.S. customary and metric units within either system.

Academy of Dover's
Mathematics Standard #1

Delaware's Mathematics
Standard #5

Academy of Dover's
Benchmark

Delaware's Performance
Indicator

Academy of Dover's Performance
Objective

As you view this sample alignment, first of all, you will see a Standard (a description of what students should know and be able to do in a given content area). In the sample, the Academy's Mathematics Standard #1 is aligned with Delaware's Mathematics Standard M5. Next, to support this standard, the Academy's Mathematics Benchmark (a statement which indicates what students should know and be able to do at various developmental levels i.e., K-2, 3-5, and 6-8) #1 has been aligned with Delaware's Performance Indicator M5.40. Finally, the Academy's Performance Objectives have been included for each benchmark to show how students will demonstrate mastery of the standard at each developmental level.

K-5
Curriculum Alignment

Mathematics

Standard 1: Estimation, Measurement and Computation

All students will develop an understanding of Estimation, Measurement and Computation by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results. DEL-M5

Strand: Estimation, Measurement and Computation		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of third grade students will be able to:</p> <p>1. Demonstrate that a single object has different attributes that can be measured in different ways (e.g., length, mass/weight, time, temperature, area and volume) M5.10</p> <p>PO1. Determine the characteristics (attributes) of an object that are measurable (e.g. length and weight are measurable; color and texture are not measurable)</p> <p>PO2. Identify the type of measure (e.g. weight, height, and volume) for each attribute.</p> <p>2. Write and use combinations and U.S.currency up to \$5.00. M5.11</p> <p>PO1. Given currency up to \$5.00, state the value of money looking at real/play money or pictures/illustrations.</p>	<p>By the end of the fifth grade students will be able to:</p> <p>1. Estimate, make and use measurements (U.S. customary and metric) to describe and make comparisons. M5.40</p> <p>PO1. Measure length, volume and weight in both U.S. customary and metric units.</p> <p>PO2. Convert measurement units to equivalent units within a given system (customary and metric)</p> <p>PO3. Estimate measurements for both U.S. customary and metric units within either system.</p> <p>2. Describe the structure and the use of systems of measurement. M5.41</p>	<p>By the end of the eighth grade students will be able to:</p> <p>1. Estimate, use and describe measures of distance, perimeter, area, volume, capacity, weight, mass and angles. M5.60</p> <p>PO1. Record estimates and measurements for;</p> <p style="padding-left: 20px;">a. distance in scale drawings, circumference, volume, mass, degrees of angles and capacity.</p> <p>PO2. Compare weight to mass and capacity to volume.</p> <p>2. Solves application problems involving estimation and measurement of length, area, time, temperature, capacity, weight and angles. M5.61</p>

Mathematics

PO2. Given currency up to \$5.00, write the value of money by looking at real/play money or pictures/illustrations.

PO3. Show equal amounts of money using a variety of currencies.

PO4. Use combinations of U.S. currency up to \$5.00 to solve real-life problems.

PO5. Given newspaper advertisements, use a calculator to estimate what might be purchased up to \$5.00.

3. Measure and compute the perimeter of rectangles. M5.12

4. Solve 2-digit addition/subtraction problems with renaming. M5.14

PO1. Demonstrate through manipulatives or illustrations renaming of tens to ones.

PO2. Illustrate and use manipulatives to solve 2-digit minus 1-digit subtraction/addition problems.

PO3. Illustrate and use manipulatives to solve 2-digit subtraction/addition problems without renaming.

PO4. Illustrate and use manipulatives to solve 2-digit subtraction/addition problems with renaming and check with a calculator.

3. Apply measurement concepts. M5.42

PO1. Measure to solve problems involving length, including perimeter, time, temperature, and area of polygons.

4. Add, subtract, multiply and divide to solve meaningful problems. M5.43

PO1. Use addition and subtraction to solve problems involving whole numbers and decimals

PO2. Use multiplication to solve problems involving whole numbers (no more than three digit times two digits without technology.)

5. Solve word problems requiring the addition and subtraction of fractions with like denominators mentally and in writing. M5.44

PO1. Review fractions using manipulatives and illustrations.

PO2. Use manipulatives to show addition and subtraction of fractions.

PO3. Write and solve addition and subtraction sentences using fractions of like denominators.

PO1. Estimate measurements and evaluate reasonableness of results.

PO2. Select and use appropriate units, tools, or formulas to measure and to solve problems involving length (including perimeter and circumference), area, time, temperature, capacity and weight.

PO3. Measure angles.

PO4. Convert measures within the same measurement system (customary and metric) based on relationships between units.

3. Solves application problems involving estimation and measurement. M5.63

PO1. Estimate measurements and solve application problems involving length (including perimeter and circumference), area and volume.

PO2. Find surface area of prisms and cylinders using concrete models and nets.

PO3. Connect models to formulas for volume of prisms, cylinders, pyramids, and cones.

PO4. Estimate answers and use formulas to solve application problems involving surface area and volume.

Mathematics

<p>5. Solve word problems by multiplying 3-digit by 1-digit 50 and 100 through 500 using a calculator to check solutions. M5.15, M5.17</p> <p>PO1. Review multiplication fact families through 5×9.</p> <p>PO2. Multiply a 2 digit or 3-digit number by a 1-digit number with no regrouping.</p> <p>PO3. Multiply a 2- digit number by 10 through 50 and 100 through 500.</p> <p>PO4. Solve real-life word problems with manipulatives, illustrations, number sentences, and check with a calculator.</p> <p>PO5. Use estimation and mental math to solve these types of real-life word problems and check with a calculator.</p> <p>6. Estimate and solve word problems involving 1-digit divisors to find 2-digit quotients with and without remainders and check solutions with a calculator. M5.16, M5.17</p> <p>PO1. Review the meaning of divisor, dividend, quotient, and remainder.</p> <p>PO2. Estimate the quotient and divide with 1-digit divisors to find 2-digit quotients without remainders as applied to real-life situations.</p>	<p>PO4. Write and solve addition and subtraction word problems using fractions with like denominators in real life situations.</p> <p>6. Analyze two-dimensional shapes for congruence, symmetry and similarity, calculate perimeter of polygons and determine area of rectangles. M5.45</p> <p>PO1. Review properties of two-dimensional geo-shapes to include congruence, symmetry and similarity and relate to the classroom setting.</p> <p>PO2. Label vertices in two-dimensional shapes and classify the angles formed as a right angle, greater than a right angle or less than a right angle.</p> <p>PO3. Calculate the perimeter of teacher-selected polygons.</p> <p>PO4. Given a specified perimeter, Draw or demonstrate using manipulatives a representative polygon.</p> <p>PO5. Determine the area by counting square units of teacher-selected rectangles.</p> <p>PO6. Given a specified number of square units, demonstrate in a variety of ways the area of rectangles using illustrations and/or manipulatives.</p>	<p>4. Solve problems involving proportional relationships. M5.62</p> <p>PO1. Use ratios to describe proportional situations.</p> <p>PO2. Represent ratios and percents with concrete models, fractions, and decimals</p> <p>PO3. Use ratios to make predictions in proportional situations</p> <p>5. Add, subtract, multiply or divide to solve problems and justify solutions. M5.64, M5.65</p> <p>PO1, Represent multiplication and division situations involving fractions and decimals with concrete models, pictures, words and numbers.</p> <p>PO2. Use addition, subtraction, multiplication, and division to solve problems involving fractions and decimals.</p> <p>PO3. Use models to add, subtract, multiply, and divide integers and connect the actions to algorithms.</p> <p>PO4. Use division to find unit rates and ratios in proportional relationships such as speed, density, price, recipes, and student-teacher ratio.</p> <p>PO5. Simplify numerical expressions involving order of operations and exponents</p>
---	---	--

Mathematics

<p>PO3. Use the multiplication checking process with a calculator to validate answers with no remainders.</p> <p>PO4. Estimate the quotient and divide with 1-digit divisors to find 2-digit quotients with remainders as applied to real-life situations.</p> <p>PO5. Use the multiplication checking proceeds with a calculator to validate answers with remainders.</p> <p>PO6. Estimate the quotient and divide with 1-digit divisors to find 2-digit quotients with or without remainders from word problems created by students.</p> <p>7. Estimate to determine reasonable results.</p> <p>PO1. Round two-digit numbers to the nearest ten and three-digit numbers to the nearest hundred.</p> <p>PO2. Estimate sums and differences beyond basic facts.</p> <p>8. Use place value to communicate about increasingly large whole numbers in verbal and written form, including money.</p> <p>PO1. Use place value to read, write (in symbols and words). And describe the value of whole numbers through 999,999.</p> <p>PO2. Use place value to compare and order whole numbers through 9,999.</p>	<p>7. Estimate to determine reasonable results. M5.46, M5.48</p> <p>PO1. Round whole numbers to the nearest ten hundred or thousand to approximate reasonable results in problem situations.</p> <p>PO2. Estimate a product or quotient beyond basic facts.</p> <p>PO3. Estimate a measurement.</p> <p>PO4. Compare the estimation to actual measure.</p> <p>PO5. Evaluate the reasonableness of the estimation.</p> <p>8. Describe how a change in the linear dimension of an object affects its perimeter, area and volume. M5.49</p> <p>PO1. Describe the change in perimeter and area when one dimension of an object is altered.</p>	<p>PO6. Select and use appropriate operations to solve problems and justify the selections</p> <p>PO7. Determine the reasonableness of a solution to a problem.</p> <p>6. Solve problems involving proportional relationships. M5.67</p> <p>PO1. Estimate and find solutions to application problems involving percent.</p> <p>PO2. Estimate and find solutions to application problems involving proportional relationships such as similarity, scaling, unit costs, and related measurement units.</p> <p>7. Understand that different forms of numbers are appropriate for different situations. M5.66</p> <p>PO1. Compare and order rational numbers in various forms including integers, percents, and positive and negative fractions and decimals.</p> <p>PO2. Select and use appropriate forms of rational numbers to solve real-life problems including those involving proportional relationships.</p> <p>PO3. Approximate the value of irrational numbers as they arise from problem situations.</p>
--	---	---

Mathematics

<p>PO3. Determine the value of a collection of coins and bills.</p> <p>9. Select and use appropriate units and procedures to measure length and area.</p> <p>PO1. Estimate and measure lengths using standard units such as inch, foot, yard, centimeter, decimeter and meter.</p> <p>PO2. Use linear measure to find the perimeter of a shape.</p> <p>PO3. Use concrete models of square units to determine the area of shapes.</p> <p>10. Uses place value to represent whole numbers and decimals.</p> <p>PO1. Use place value to read, write, compare and order whole numbers through the millions place.</p> <p>PO2. Use place value to read, write, compare, and order decimals involving tenths and hundredths, including money, using concrete models.</p>		<p>PO4. Express numbers in scientific notation, including negative exponents, in appropriate problem situations.</p>
--	--	--

Mathematics

Standard 2: Number Sense

All students will develop Number Sense by solving problems in which there is a need to represent and model real numbers verbally, physically and symbolically; to use operations with understanding; to explain the relationship between numbers; to apply the concept of a unit, and to determine the relative magnitude of real numbers. DEL-M6

Strand: Number Sense		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of third grade students will be able to:</p> <p>1. Represent and use numbers in equivalent forms through use of physical models, drawings, word names and symbols. M6.10, M6.11, M6.12</p> <p>PO1. Make a model to represent a given whole number.</p> <p>PO2. Identify a whole number represented by a model with a word name and symbol.</p> <p>PO3. Construct equivalent forms of whole numbers.</p> <p>PO4. Make a model to represent a given fraction.</p> <p>PO5. Identify the fraction represented by a model with a word name and symbol.</p> <p>PO6. Identify a given model that is divided into</p>	<p>By the end of the fifth grade students will be able to:</p> <p>1. Read, write and order integers, whole numbers and rational numbers. M6.40</p> <p>PO1. Compare and order using concrete or illustrated models.</p> <p>a. whole numbers b. common fractions c. decimals</p> <p>PO2. Represent place value using illustrated models.</p> <p>a. whole numbers</p> <p>PO3. Read and write whole numbers, integers, and common fractions and decimals using real-world situations.</p> <p>a. whole numbers, decimals, fractions</p>	<p>By the end of the eighth grade students will be able to:</p> <p>1. Read, write and order integers, whole numbers and rational numbers. M6.60</p> <p>PO1. Compare and order using concrete or illustrated models.</p> <p>a. whole numbers b. common fractions c. decimals d. rational numbers</p> <p>PO2. Represent place value using concrete or illustrated models.</p> <p>a. whole number b. rational numbers.</p>

Mathematics

<p>equal fractional parts.</p> <p>2. Understand the meaning for and application of the operations of addition, subtraction, multiplication and division. M6.13</p> <p>PO1. Demonstrate with models to show the process used in addition.</p> <p>PO2. Demonstrate with models to show the process used in subtraction.</p> <p>PO3. Demonstrate with models to show the process used in multiplication.</p> <p>PO4. Demonstrate with models to show the process used in division.</p> <p>PO5. Demonstrate with models the operations of addition and subtraction up to two three-digit whole numbers.</p> <p>3. Relate, counting, grouping and place-value concepts to whole numbers. M6.15</p> <p>PO1. Read whole numbers up to one thousand.</p> <p>PO2. Write whole numbers up to one thousand.</p> <p>PO3. Order whole numbers.</p> <p>PO4. Construct a model to represent place value concepts</p> <p>PO5. Write a whole number in expanded notation.</p>	<p>2. Relate the basic arithmetic operations to one another. M6.41, M6.43</p> <p>PO1. Represent the process of multiplication as repeated addition, using concrete or illustrative models.</p> <p style="padding-left: 20px;">a. whole numbers</p> <p>PO2. Represent the process of division as repeated subtraction, partitioning a group and partitioning a whole using concrete or illustrative models.</p> <p style="padding-left: 20px;">a. whole numbers</p> <p>PO3. Write the family of equations using inverse operations for a given set of numbers.</p> <p style="padding-left: 20px;">a. whole numbers with addition/subtraction and multiplication/division.</p>	<p>PO3. Read and write whole numbers, integers, common fractions and decimals using real-world situations.</p> <p style="padding-left: 20px;">a. whole numbers b. rational numbers</p> <p>2. Relate the basic arithmetic operations to one another. M6.61</p> <p>PO1. Represent the process of multiplication as repeated addition using concrete or illustrative models.</p> <p style="padding-left: 20px;">a. whole numbers b. fractions and decimals</p> <p>PO2. Represent the process of division as repeated subtraction, partitioning a group and partitioning a whole using concrete or illustrative models.</p> <p style="padding-left: 20px;">a. whole numbers b. fractions and decimals</p> <p>PO3. Write the family of equations using inverse operations for a given set of numbers.</p> <p style="padding-left: 20px;">a. whole numbers with addition/subtraction and multiplication/division. b. positive fractions and decimals, integers with addition/subtraction and multiplication/division</p>
--	---	---

Mathematics

PO6. Read aloud a whole number with correct place value words.

PO7. Count money to \$5.00 using bills and coins.

4. Demonstrate proficiency with the operations of addition and subtraction of whole numbers. M6.16

PO1. Demonstrate proficiency with basic facts up to 20.

PO2. Add and subtract two three-digit whole numbers.

PO3. Solve problems using a variety of mental computations and estimation.

5. Demonstrate proficiency with the operations of multiplication and division of single-digit numbers. M6.18

PO1. Demonstrate proficiency with basic facts up to the fives.

PO2. Solve problems using a variety of mental computations and estimation.

6. Add and subtract commonly used fractions and decimals.

PO1. Demonstrate with model addition and subtraction of fractions with denominators.

3. Represent and use rational numbers in a variety of equivalent forms. M6.62, M6.63

PO1. Compare and order non-negative rational numbers.

PO2. Generate equivalent forms of rational numbers including whole numbers, fractions, and decimals.

PO3. Use integers to represent real-life situations.

PO4. Write prime factorizations using exponents.

PO5. Identify factors and multiples including common factors and common multiples.

4. Add, Subtract, Multiply and Divide to solve problems and justify solutions. M.6.65

PO1. Model addition and subtraction situations involving fractions with objects, pictures, words, and numbers.

PO2. Use addition and subtraction to solve problems involving fractions and decimals

PO3. Use multiplication and division of whole numbers to solve problems including situations involving equivalent ratios and rates.

Mathematics

PO2. Add and subtract money up to \$5.00.

7. Using whole numbers through thousands, identify place value, compare numbers as greater than, less than, or equal and differentiate as odd or even. M6.14

PO1. Use base ten blocks to show a given Number and will identify and label the ones, tens, hundreds, and thousands.

PO2. Use base ten blocks and write sentences using $>$, $<$, and $=$ symbols to compare 2-, 3-, and 4- digit numbers.

PO3. Using manipulatives and illustrations, identify odd and even numbers through thousands.

PO4. Predict and determine an odd and/or even pattern on a number line.

PO5. Add or subtract one, two or three from given models and predict then determine if the result is odd or even.

8. Given two numerals up to number 100 prove which set is greater than, less than, or equal to. M6.20

PO1. Count the number of objects up to 100 in a set.

PO2. Create two sets of objects that are equal and write the numeral

PO4. Estimate and round to approximate reasonable results and to solve problems where exact answers are not required.

5. Select and use appropriate operations to solve problems and justify solutions. M6.64

PO1. Select and use appropriate operations to solve problems and justify the selections.

PO2. Add, subtract, multiply and divide rational numbers in problem situations.

PO3. Evaluate a solution for reasonableness.

PO4. Use multiplication by a constant factor to represent proportional relationships.

Mathematics

<p>PO3. Create two sets and write the corresponding numerals then state which set is greater or less.</p> <p>PO4. Prove which numeral is greater than, less than, or equal by using manipulatives.</p> <p>9. Recognize the arbitrary size of a unit. M6.17</p> <p>10. Recognize inverse operations: subtract/add and divide/multiply. M6.19</p> <p>11. Count on, count back, and count by multiples. M6.21</p>		
---	--	--

Mathematics

Standard 3: Algebra

All students will use algebraic methods to explore, model and describe patterns, relationships and functions involving numbers, shapes data and graphs within a variety of real-world problem-solving situations. DEL-M7

Strand: Algebra		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of third grade students will be able to:</p> <p>1. Write a mathematical equation using symbols (+, -, =) to match a specific verbal story problem involving addition of two and three addends with sums to 10 and subtraction problems with number value of 10 or under. M7.10, M7.11</p> <p>PO1. Solve simple story problems by deciding whether to add or subtract.</p> <p>PO2. Develop a math equation with two addends and sum under, or equal to, 10 and check with a calculator.</p> <p>PO3. Develop a math equation with three addends with a sum under, or equal to, 10 and check with a calculator.</p> <p>PO4. Develop a subtraction equation with the largest number being less than 10 and check with a calculator</p>	<p>By the end of the fifth grade students will be able to:</p> <p>1. Divide by 1-digit divisors to find 3-digit quotients in solving and creating word problems and check the solutions with a calculator using the inverse operation. M7.40</p> <p>PO1. Analyze teacher-generated situations in division where dividing by a 1-digit divisor results in a 3-digit quotient for real-life application.</p> <p>PO2. Use manipulatives and/or illustrations to solve and explain word problems and then state as mathematical equations.</p> <p>PO3. Estimate and solve word problems by dividing a 1-digit divisor to find a 3-digit quotient and check with a calculator using the inverse operation.</p>	<p>By the end of the eighth grade students will be able to:</p> <p>1. Use algebraic methods to explore, model and describe patterns and functions involving numbers, shapes, graphs and data plots. M7.60</p> <p>PO1. Extend simple geometric and number patterns.</p> <p>PO2. Create sample geometric and number patterns.</p> <p>PO3. Describe a rule for a simple pattern.</p> <p>PO4. Generate patterns using algebraic expressions.</p> <p>2. Describe the concepts of variables, expressions, equations and inequalities. M7.62</p> <p>PO1. Describe and use variables in a contextual situation.</p>

Mathematics

PO5. Verbally give a story problem.

2. Recall single digit addition facts and solve problems with sums to 18 using the commutative property and the identity property and recall related subtraction facts and solve problems. M7.12, M7.13

PO1. Demonstrate, through manipulatives and illustrations, addition facts to 18 and related subtraction facts.

PO2. Solve a single digit addition problem with sums to 18 showing use of the commutative and identity properties, and check with a calculator.

PO3. Solve single digit subtraction problems with minuends to 18 and check with a calculator.

PO4. Show mastery of the memorization of addition facts to 18 and related subtraction facts, in written or oral form.

PO5. Complete a number sentence by replacing an unknown with its value and dictate a story to fit the open sentence.

PO6. Find the missing number in addition and subtraction number sentences.

PO4. Create word problems to share with peers involving a 1-digit divisor and a 3-digit quotient in word problems.

2. Solve simple linear equations and inequalities using a variety of methods and a variety of manipulatives. M7.41

PO1. Solve equations using:

- a. whole numbers with one variable – one step

PO2. Graph given data points to represent a linear equation.

- a. on a coordinate grid with whole numbers

3. Use manipulatives or visual representation to write and solve equations with one variable. M7.42

PO1. Arrange the numbers to form an equation and illustrate with manipulatives using the four basic operations.

PO2. Use manipulatives to solve an equation.

PO3. Illustrate a simple equation (s) with one variable for a peer to write and solve.

PO2. Evaluate an expression using substitution with four basic operations of whole numbers.

PO3. Translate a written phrase to an algebraic expression and vice versa.

PO4. Express a simple inequality from a contextual situation.

3. Analyze functional relationships to explain how a change in one variable results in a change in another. M7.61

PO1. Describe a real-life situation in which a change in one variable results in the change of the other.

PO2. Produce the rule (function) that explains the relationship (pattern) between the numbers when a change in the first variable affects the second variable.

PO3. Compute an "output" for a given "input" in a function.

PO4. Complete a T-chart for a given rule

4. Distinguish between linear and nonlinear functions through investigations. M7.65

PO1. Distinguish between linear and nonlinear functions, given graphic examples.

8.3
Curriculum Alignment

Mathematics

	<p>PO4. Solve an equation with one variable.</p> <p>PO5. Write an equation with one variable and solve using manipulatives or illustrations.</p>	<p>5. Solve simple linear equations and inequalities using a variety of methods and a variety of manipulatives. M7.63</p> <p>PO1. Solve equations using:</p> <ul style="list-style-type: none">a. whole numbers with one variable-one stepb. whole numbers with one variable-multiple steps. <p>PO2. Solve linear equations using models/manipulatives, symbols and/or graphing in a one-step equation.</p> <p>PO3. Graph given data points to represent a linear equation.</p> <ul style="list-style-type: none">a. on a coordinate grid with whole numbers.b. In (x,y) form using all four quadrants of a coordinate grid. <p>6. Develop, analyze and explain methods for solving proportions. M7.64</p> <p>PO1. Describe how to solve problem in context using a proportion.</p> <p>PO2. Compare quantities using ratios.</p> <p>PO3. Solve proportions using formal or</p>
--	--	--

Mathematics

Standard 4: Geometry

All students will use geometric methods, properties and relationships as a means to recognize, draw, describe, connect, and analyze shapes and representations in the physical world. DEL-M8

Strand: Geometry		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of third grade students will be able to:</p> <p>1. Relate geometric concepts to number and measurement ideas. M8.10</p> <p>PO1. Identify two-dimensional shapes by name and attribute.</p> <p>PO2. Draw two-dimensional shapes.</p> <p>PO3. Identify three-dimensional figures by name and/or attribute.</p> <p>PO4. Compare attributes of two-dimensional shapes.</p> <p>PO5. Compare attributes of three-dimensional figures.</p> <p>PO6. Use a rectangular array to represent a multiplication fact.</p>	<p>By the end of the fifth grade students will be able to:</p> <p>1. Visualize and draw two-and-three dimensional geometric figures with special attention to analyzing and reasoning informally about their properties. M8.40</p> <p>PO1. Classify two-dimensional shapes and three-dimensional figures by their properties.</p> <p>a. by sight</p> <p>PO2. Identify the properties of geometric figures by using appropriate terminology and vocabulary.</p> <p>a. two-dimensional shapes</p> <p>PO3. Draw or build two-dimensional shapes by applying significant properties of each.</p>	<p>By the end of the eighth grade students will be able to:</p> <p>1. Demonstrate the principles of indirect measure by using similarity, congruence and the Pythagorean Theorem. M8.65, M8.66</p> <p>PO1. Identify congruent figures and their corresponding sides and angles.</p> <p>PO2. Identify similar figures and their corresponding congruent angles and corresponding proportional sides.</p> <p>PO3. Find the missing sides of similar polygons.</p> <p>PO4. Solve real-world problems involving similar polygons.</p> <p>PO5. Solve problems applying the Pythagorean Theorem.</p> <p>PO6. Solve real world problems that involve finding the third side of a right triangle</p>

Mathematics

<p>2. Differentiate between and reproduce geometric shapes (circles, squares, rectangles and triangles). M8.12, M8.14</p> <p>PO1. Name and differentiate between the four basic shapes.</p> <p>PO2. Reproduce geometric shapes using tracing materials.</p> <p>PO3. Reproduce geometric shapes with concrete materials showing various forms.</p> <p>PO4. Reproduce and describe geometric shapes on paper.</p> <p>3. Identify congruence, symmetry, and movement of plane figures and estimate the number of figures needed to tile a given figure. M8.11, M8.13, M8.15</p> <p>PO1. Identify symmetry in different geometric shapes with manipulatives.</p> <p>PO2. Recognize and reproduce congruent figures with/without manipulatives.</p> <p>PO3. Demonstrate, name and describe a slide, flip, and turn of an object using manipulatives.</p> <p>PO4. Estimate the number of smaller shapes needed to completely cover a larger shape with/without manipulatives and relate to real-life situations.</p>	<p>2. Given a net, build three-dimensional figures such as a cube, rectangular prism, cylinder and square pyramid. M8.41</p> <p>3. Model transformations. M8.42</p> <p>PO1. Sketch the results of translations, rotations, and reflections.</p> <p>4. Generate geometric definitions using critical attributes. M8.43</p> <p>PO1. Identify critical attributes including parallel, perpendicular, and congruent parts of geometric shapes and solids.</p> <p>PO2. Use critical attributes to define geometric shapes or solids.</p> <p>5. Recognize, produce, and classify special triangles and quadrilaterals and identify their lines of symmetry and transformations. M8.44</p> <p>PO1. Measure the sides and angles of given triangles and group them together based on their similarities.</p> <p>PO2. Identify and state properties of isosceles, equilateral scalene, obtuse, right, and acute triangles.</p> <p>PO3. Measure the sides and angles of given quadrilaterals and group them.</p>	<p>PO7. Explore tangent ratio</p> <p>2. Visualize and draw orthographic projections. M8.64</p> <p>3. Compare and classify shapes and solids using geometric vocabulary and properties. M8.60</p> <p>PO1. Use angle measurements to classify pairs of angles as complementary or supplementary.</p> <p>PO2. Use properties to classify shapes including triangles, quadrilaterals, pentagons, and circles.</p> <p>PO3. Use properties to classify solids, including pyramids, cones, cones, prisms, and cylinders.</p> <p>PO4. Use critical attributes to define similarity.</p> <p>4. Use coordinate geometry to describe location on a plane. M8.61</p> <p>PO1. Locate and name points on a coordinate plane using ordered pairs of integers.</p> <p>PO2. Graph translations on a coordinate plane using ordered pairs of integers.</p> <p>5. The students uses geometry to model and describe the physical</p>
--	--	--

K-
Curriculum Alignment

Mathematics

	<p>together based on their similarities.</p> <p>PO4. Identify and state properties of trapezoids, rhombuses, parallelograms, squares, and rectangles.</p> <p>PO5. Produce special triangles and quadrilaterals.</p> <p>PO6. Identify all lines of symmetry in all special figures.</p> <p>PO7. Transform all special figures.</p>	<p>world M8.62</p> <p>PO1. Sketch a solid when given the top, side and front views</p> <p>PO2. Make a net (two dimensional model) of the surface area of the solid.</p> <p>PO3. Use geometric concepts and properties to solve problems in fields such as art and architecture.</p> <p>6. Solve real-life problems using formulas to determine surface area and volume of cones, pyramids and spheres. M8.63</p> <p>PO1. Identify and construct cones, pyramids, and spheres to explore the relationships between the faces, vertices, and edges of a polyhedron.</p> <p>PO2. Estimate and find the surface area of cones, pyramids and spheres.</p> <p>PO3. Estimate and find the volume of cones, pyramids and spheres</p> <p>PO4. Apply surface area and volume in realistic situations.</p>
--	---	---

K-12
Curriculum Alignment

Mathematics

Standard 5: Statistics and Probability

All students will develop an understanding of Statistics and Probability by solving problems in which there is a need to collect, appropriately represent, and interpret data; to make inferences or predictions; to present convincing arguments; and to model mathematical situations to determine the probability. DEL-M9

Strand: Statistics and Probability		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of third grade students will be able to:</p> <p>1. Collect and analyze data using the concepts of largest, smallest, most often, least often and middle. M9.10</p> <p>PO1. Collect and record data from surveys or experiments,</p> <p>PO2. Organize information from surveys or experiments.</p> <p>PO3. Identify largest, smallest, most often recorded, least often and middle.</p> <p>PO4. Formulate questions from organized data.</p> <p>2. Construct, read and interpret displays of data to make valid decisions, inferences and predictions. M9.11, M9.12</p> <p>PO1. Make and label a graph from organized data</p> <p>PO2. Answer questions about a circle graph divided into halves and fourths</p>	<p>By the end of the fifth grade students will be able to:</p> <p>1. Construct, read, analyze and interpret tables, charts, graphs and data plots. M9.40, M9.41</p> <p>PO1. Construct bar graphs, line graphs, frequency tables and Venn Diagrams.</p> <p>PO2. Interpret and analyze data from graphical representations and draw simple conclusions.</p> <p style="padding-left: 20px;">a. Bar graphs, line graphs, circle graphs, frequency table and Venn diagrams.</p> <p>2. Make valid inferences, predictions and arguments based on statistical analysis. M9.44</p> <p>PO1. Formulate predictions from a given set of data and justify predictions.</p>	<p>By the end of the eighth grade students will be able to:</p> <p>1. Construct, read, analyze and interpret tables, charts, graphs and data plots. M9.60, M9.61</p> <p>PO1. Construct histograms, stem-and-leaf plots, scatter plots, circle graphs and flow charts</p> <p>2. Interpret and analyze data from graphical representations and draw simple conclusions.</p> <p>PO1. Construct histograms, stem-and leaf plots; scatter plots, circle graphs and flow charts.</p> <p>PO2. Choose an appropriate graphical format to organize and represent data.</p> <p>3. Make valid inferences, predictions and arguments based on statistical analysis. M9.62</p>

Mathematics

PO3. Answer questions about a pictograph where each symbol represents multiple units.

PO4. Write a title representing the main idea of a graph.

PO5. Locate points on a line graph using ordered pairs.

PO6. Draw conclusions from graphed data.

PO7. Formulate questions from graphs, charts and tables.

PO8. Solve problems using graphs, charts and tables.

3. Predict and measure the likelihood of events and recognize that the results of an experiment may not match predicted outcomes. M9.13

PO1. Collect and record data from a probability experiment.

PO2. Organize data from a probability experiment.

PO3. Name the possible outcomes of the probability experiment.

PO4. Predict the most likely or least likely outcome in probability experiments.

PO5. Compare the outcome of the experiment to the predictions.

PO2. Compare a given prediction with the results of an investigation.

3. Display and use measures of range and central tendency. M9.42

PO1. Find the mean, median, mode and range of data using concrete and illustrative models.

4. Use counting strategies to determine all the possible outcomes of a particular event using a tree diagram. M9.45

PO1. Find all possible outcome sets involving two sets of objects.

5. Determine probabilities through experiments and/or simulations and compare the results with the mathematical expectation. M9.46

PO1. Make predictions from the results of a student-generated experiment

a. single events

PO2. Describe events that are certain or impossible.

PO3. Identify outcomes that are more likely, to occur.

PO1. Formulate predictions from a given set of data and justify predictions.

PO2. Compare a given prediction with the results of an investigation.

PO3. Critique the conclusions and recommendations of others' statistics.

PO4. Consider the effects of missing or incorrect information.

4. Display and use measures of range and central tendency. M9.64

PO1. Find the mean, median, mode and range of a data set.

PO2. Choose appropriate measures of central tendencies to describe given or derived data.

5. Use counting strategies to determine all the possible outcomes of a particular event. M9.45

PO1. Find all possible outcome sets involving two or more sets of objects.

PO2. Find all possible arrangements given a set.

6. Determine probabilities through experiments and/or simulations and compare the results with the mathematical expectation. M9.46

18.7
Curriculum Alignment

Mathematics

		<p>PO1. Make predictions from the results of a student generated experiment</p>
--	--	---

a. two-stage events

PO2. Determine and compare experimental and mathematical probabilities

PO3. Express probability as a fraction, zero, or one.



Mathematics

Standard 6: Patterns, Relationships and Functions

All students will use algebraic methods to explore, model and describe Patterns, Relationships and Functions involving numbers, shapes, data and graphs within a variety of real-world problem solving situations. DEL-M10

Strand: Patterns, Relationships and Functions		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of third grade students will be able to:</p> <p>1. Create, describe and extend a variety of patterns using shapes, events, concrete objects, designs and numbers. M10.11</p> <p>PO1. Create a pattern using a model.</p> <p>PO2. Communicate orally or in written form the repetition of objects in a pattern.</p> <p>PO3. Communicate orally or in written form a given pattern occurring in a sequence of numbers.</p> <p>PO4. Extend patterns using a model.</p> <p>PO5. Extend a given pattern occurring in a sequence of numbers.</p> <p>2. Sort and classify objects by common attributes. M10.10</p>	<p>By the end of the fifth grade students will be able to:</p> <p>1. Recognize, analyze, create, extend and describe a wide variety of patterns. M10.40</p> <p>PO1. Predict, show and describe patterns formed by repeating growing and/or shrinking by 0 to 10 on a number line.</p> <p>PO2. Describe the pattern of numbers given on a number line or hundreds chart and record the fact family represented.</p> <p>PO3. Create and describe a repeating pattern on the number line, hundreds chart and calculator.</p> <p>PO4. Solve problems with one missing variable for appropriate operations using a number line, hundreds chart, and calculator.</p>	<p>By the end of the eighth grade students will be able to:</p> <p>1. Recognize, analyze, create, extend, describe and generalize a wide variety of patterns and relationships. M10.60</p> <p>PO1. Use concrete objects or pictures to make generalizations about determining all possible combinations.</p> <p>PO2. Use lists, tables, charts and diagrams to find patterns and make generalizations such as a procedure for determining equivalent fractions.</p> <p>PO3. Identify prime and composite numbers using concrete models and patterns in factor pairs.</p> <p>2. Analyze functional relationships to explain how a change in one variable results in a change in another. M10.61</p>

Curriculum Alignment

Mathematics

<p>PO1. Sort within the category of color.</p> <p>PO2. Sort within the category of size.</p> <p>PO3. Sort within the category of shape.</p> <p>PO4. Reproduce various three element patterns.</p> <p>PO5. Verbally describe a three-attribute pattern.</p> <p>PO6. Extend three element or attribute patterns.</p> <p>PO7. Create new patterns given three elements or attributes.</p> <p>3. Sort numbers into different classes such as evens, odds, multiples and factors. M10.12</p> <p>PO1. Find patterns in numbers, including odd and even.</p> <p>PO2. Compare and order whole numbers using place value.</p> <p>PO3. Identify patterns in related addition and subtraction sentences such as $2+3=5$, $3+2=5$, $5-2=3$ and $5-3=2$</p>	<p>PO5. Solve real-life word problems using patterning.</p> <p>2. Use lists, tables, ruler, variables, open sentences, charts, and graphs to express patterns, functions and other relationships. M10.42</p> <p>PO1. Generate a table of paired numbers based on a real-life situation such as insects and legs.</p> <p>PO2. Identify patterns in a table of related number pairs based on a real-life situation and extend the table.</p> <p>PO3. Describe a real-life situation in which a change in one variable results in the change of the other.</p> <p>PO4. Compute an "output" for a given 'input' in a function.</p> <p>3. Investigate and predict the results of combining, subdividing and changing shapes. M10.41</p> <p>PO1. Identify and extend whole number and geometric patterns to make predictions and solve problems.</p> <p>PO2. Identify patterns in multiplication facts using concrete objects pictorial models or technology</p>	<p>PO1. Produce the rule (function) that explains the relationship (pattern) between the numbers when a change in the first variable affects the second variable.</p> <p>PO2. Complete a T-chart for a given rule.</p> <p>3. Use letters as variables in mathematical expressions to describe how one quantity changes when a related quantity changes. M10.62</p> <p>PO1. Generate formulas involving conversions, perimeter, area, circumference, volume and scaling.</p> <p>PO2. Graph data to demonstrate relationships in familiar concepts such as conversions, perimeter, area circumference, volume and scaling.</p> <p>PO3. Describe the relationship between the terms in a sequence and their positions in the sequence.</p> <p>4. Make connections among various representations of a numerical relationship. M10.63</p> <p>PO1. Generate a different representation given one representation of data such as a table, graph, equation, or verbal description.</p>
---	--	--

Mathematics

	<p>PO3. Identify patterns in related multiplication and division sentences (fact families).</p> <p>4. Identify patterns for explaining the concepts of computation. M10.43</p> <p>PO1. Use patterns to develop strategies to remember basic multiplication facts.</p> <p>PO2. Solve division problems related to multiplication fact.</p> <p>PO3. Use patterns to multiply by 10 and 100.</p>	<p>5. Use a calculator and computer software to explore number patterns and mathematical relationships. M10.64</p> <p>6. Use patterns and functions to represent and solve problems. M10.65</p> <p>PO1. Estimate, find and justify solutions to application problems using appropriate tables, graphs, and algebraic equations.</p> <p>PO2. Use an algebraic expression to find any term in a sequence.</p>
--	--	---

Curriculum Alignment

English Language Arts

Standard 1: Written and Oral Communication

All students will effectively use written and oral language for a variety of purposes and with a variety of audiences. D1.1-W01

Strand: Writing/Speaking		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of third grade students will be able to</p> <p>1. Use the writing process, including generating topics, drafting, revising ideas and editing, to complete effectively a variety of writing tasks. WO-1.3</p> <p>P01. Generate topics through prewriting activities (e.g., brainstorming, webbing, mapping, drawing, writer's notebook, K-W-L charts, scaffolds, group discussion)</p> <p>P02. Align purpose (e.g., to entertain, to inform, to communicate) with audience</p> <p>P03. Write a first draft with the necessary components for a specific genre</p> <p>P04. Revise draft content (e.g., organization, relevant details, clarity)</p> <p>P05. Edit revised draft using resources (e.g., dictionary, word lists and banks, thesaurus, spell checker, glossary, style manual, grammar and usage reference)</p> <p>P06. Proofread revised draft</p>	<p>By the end of the fifth grade students will be able to:</p> <p>1. Use correct spelling, punctuation, capitalization, grammar and usage, along with varied sentence structure and paragraph organization, to complete effectively a variety of writing tasks. WO-1.3</p> <p>P01. Spell correctly</p> <p>P02. Punctuate correctly (e.g., sentence endings, commas in a friendly letter's greeting and closing, commas in a series, abbreviations, quotations in dialog, apostrophes)</p> <p>P03. Apply rules of capitalization (e.g., sentence beginnings, titles, abbreviations, proper nouns)</p> <p>P04. Apply standard grammar and usage (e.g., subject-verb agreement, simple and compound sentences, appropriate verb tense, plurals)</p> <p>P05. Organize paragraphs with a variety of sentence structures (e.g., simple,</p>	<p>By the end of the eighth grade students will be able to:</p> <p>1. Use correct spelling, punctuation, capitalization, grammar and usage, along with varied sentence structure and paragraph organization, to complete effectively a variety of writing tasks. WO-1.3</p> <p>P01. Spell correctly</p> <p>P02. Punctuate correctly (e.g., sentence endings, commas in a series, commas in compound sentences, abbreviations, quotation marks, colon in a business letter greeting, apostrophes)</p> <p>P03. Apply rules of capitalization (e.g., sentence beginnings, titles, abbreviations, proper nouns, direct quotations)</p> <p>P04. Apply standard grammar and usage (e.g., subject-verb agreement; simple and compound and complex sentences, appropriate verb tense, plurals; prepositions)</p>

English Language Arts

P07. Present final copy according to purpose (e.g., read aloud, display, publish, mail, send, perform)

2. Use correct spelling, punctuation, capitalization, grammar and word usage, and good penmanship to complete effectively a variety of writing tasks. **WO-1.2**

P01. Spell high frequency words correctly

P02. Punctuate endings of sentences

P03. Capitalize sentence beginnings and proper nouns.

P04. Use standard, age-appropriate grammar and word usage (e.g., basic subject-verb agreement, complete simple sentences, appropriate verb tense, regular plurals)

P05. Write legibly

3. Write a personal experience narrative or a creative story that has a beginning, middle, and end and uses descriptive words or phrases to develop ideas and advance the characters, plot and setting. **WO-1.3**

P01. Write a narrative

- a. Establish a beginning, middle and end
- b. Use sensory details to describe or;

P02. Write a story

compound)

2. Write a personal experience narrative or creative story that includes a plot and shows the reader what happens through well-developed characters, setting, dialog, and themes and uses figurative language, descriptive words and phrases. **WO-1.3**

P01. Write a personal experience narrative

- a. Develop a story line in a sequence that is clear
- b. Use descriptive words and phrases or;

P02. Write a story

- a. Develop a story line in a sequence that is clear.
- b. Develop the characters
- c. Describe the setting
- d. Use dialog when appropriate
- e. Use descriptive words and phrases
3. Write a summary that presents information clearly and accurately, contains the most significant details and preserves the position of the author. **WO-1.3**

P05. Organize paragraphs with a variety of sentence structures (e.g., simple, compound, complex)

2. Write a personal experience narrative or creative story that includes a plot and shows the reader what happens through well-developed characters, setting, dialog, and themes and uses figurative language, descriptive words and phrases. **WO-1.3**

P01. Write a personal experience narrative

- a. Develop a story line in a sequence that is clear
- b. Use descriptive words and phrases or;

P02. Write a story

- a. Develop a story line in a sequence that is clear.
- b. Develop the characters
- c. Describe the setting
- d. Use dialog when appropriate
- e. Use simile, metaphor or descriptive words and phrases
3. Write a summary that presents information clearly and accurately, contains the most significant details and preserves the position of the author. **WO-1.3**

English Language Arts

<p>a. Use sensory details to describe setting and characters</p> <p>b. Develop a story line with a problem and events leading to a solution</p> <p>4. Gather, organize and accurately, clearly and sequentially report information gained from personal observations and experiences such as science experiments, field trips and classroom visitors. WO-1.2</p> <p>P01. Record observations (e.g., logs, lists, graphs, charts, tables, illustrations)</p> <p>P02. Write an introductory statement</p> <p>P03. Report events sequentially</p> <p>P04. Write a concluding statement</p> <p>5. Locate, acknowledge and use several sources to write an informational report. WO-1.2</p> <p>P01. Use resources (e.g., video tapes, magazines, informational books, reference materials, interviews, guest speakers, Internet) and report information in their own words</p> <p>P02. Write an introductory statement, followed by details to support the main idea</p> <p>P03. List resources used by title</p>	<p>P01. Use own words except for material quoted</p> <p>P02. Preserve the author's perspective and voice</p> <p>P03. Contain main ideas of event/article/story plus the most significant details</p> <p>P04. Present clearly written and organized information</p> <p>4. Write an expository essay that contains effective introductory and summary statements and fully develops the ideas with details, facts, examples and descriptions. WO-1.2</p> <p>P01. Write an expository essay that begins by stating the thesis (purpose) with an effective introductory statement or paragraph; provides smooth transitions; and ends with either a paragraph concluding the development of the thesis, a summary or a clincher statement. WO-1.2</p> <p>P02. Use own words (except for quoted material) to develop ideas accurately and clearly with supporting details, facts, examples or descriptions.</p> <p>P03. Use personal interpretation, analysis, evaluation or reflection to evidence understanding of subject</p>	<p>P01. Use own words except for material quoted</p> <p>P02. Preserve the author's perspective and voice</p> <p>P03. Contain main ideas of event/article/story plus the most significant details</p> <p>P04. Present clearly written and organized information</p> <p>4. Write an expository essay that contains effective introductory and summary statements and fully develops the ideas with details, facts, examples and descriptions. WO-1.2</p> <p>P01. Write an expository essay that begins by stating the thesis (purpose) with an effective introductory statement or paragraph; provides smooth transitions, and ends with either a paragraph concluding the development of the thesis, a summary or a clincher statement. WO-1.2</p> <p>P02. Use own words (except for quoted material) to develop ideas accurately and clearly with supporting details, facts, examples or descriptions.</p> <p>P03. Use personal interpretation, analysis, evaluation or reflection to evidence understanding of subject</p>
--	---	---

English Language Arts

<p>6. Write well-organized communications, such as friendly letters, memos and invitations, for a specific audience and with a clear purpose. WO-1.2</p> <p>P01. Organize content, including necessary components of the selected format, for a specified audience</p> <p>P02. Place commas correctly in components (e.g., heading, greeting, closing, address) unique to letters, memos, invitations</p> <p>7. Tell or retell a personal experience or creative story in a logical sequence. WO-1.3</p> <p>8. Use effective vocabulary and logical organization to relate or summarize ideas, events and other information. WO-1.2</p> <p>9. Give and follow multiple-step directions.</p> <p>10. Prepare and deliver information by generating topics; identifying the audience; and organizing ideas, facts or opinions for a variety of speaking purposes such as giving directions, relating personal experiences, telling a story or presenting a report. WO-1.1</p>	<p>5. Write a report that conveys a point of view and develops a topic with appropriate facts, details, examples and descriptions from a variety of cited sources.</p> <p>P01. Write a report in own words that states, develops and provides a concluding statement for a point of view (perspective) about a topic that is narrow enough to be adequately covered. WO-1.2</p> <p>P02. Use logical sequence (including transitional words and phrases such as first, next, then)</p> <p>P03. Provide support through facts, details, examples or descriptions that are appropriate, directly related to the topic and from a variety of cited sources.</p> <p>6. Write formal communications, such as personal or business letters, messages, directions and applications, in an appropriate format and for a specific audience and purpose. WO-1.2</p> <p>P01. Write a formal communication in an appropriate format for a specific audience and purpose</p>	<p>5. Write a report that conveys a point of view and develops a topic with appropriate facts, details, examples and descriptions from a variety of cited sources.</p> <p>P01. Write a report in own words (except for material quoted) that states, develops and provides a concluding statement for a point of view (perspective) about a topic that is narrow enough to be adequately covered. WO-1.2</p> <p>P02. Organize a report with a clear beginning, middle and end including use of smooth transitions.</p> <p>P03. Provide support through facts, details, examples or descriptions that are appropriate, directly related to the topic, and from a variety of cited sources.</p> <p>P04. Use personal interpretation, analysis, evaluation or reflection to evidence understanding of subject.</p> <p>6. Write formal communications, such as personal or business letters, messages, directions and applications, in an appropriate format and for a specific audience and purpose. WO-1.2</p> <p>P01. Write a formal communication in an appropriate format for a specific audience and purpose.</p>
--	--	---

K-8
Curriculum Alignment

English Language Arts

	<p>P02. Organize ideas in a meaningful sequence using transitional words or phrases (e.g., first, next, then)</p> <p>P03. Express ideas that are clear and directly related to the topic</p> <p>7. Write a response to a literary selection by supporting their ideas with references to the text, other works or experiences. WO-1.3</p> <p>P01. Write a clear response supported with examples from the text, other works or experiences</p> <p>P02. Relate own ideas to supporting details in a clear manner</p> <p>P03. Organize response with a clear beginning, middle and end</p> <p>8. Demonstrate research skills using reference materials such as a dictionary, encyclopedia and thesaurus to complete effectively a variety of writing tasks. WO-1.3</p>	<p>P02. Organize ideas in a meaningful sequence using smooth transitions</p> <p>P03. Express ideas that are clear and directly related to the topic</p> <p>7. Write a response to a literary selection by supporting their ideas with references to the text, other works or experiences. WO-1.3</p> <p>P01. State clearly a position that is interpretive, analytic, evaluative or reflective</p> <p>P02. Support inferences and conclusions with examples from the text, personal experience, references to other works or reference to non-print media</p> <p>P03. Relate own ideas to supporting details in a clear and logical manner.</p> <p>P04. Provide support adequate to the literary selection (e.g., short poem vs. novel)</p> <p>8. Demonstrate research skills using reference materials such as a dictionary, encyclopedia and thesaurus to complete effectively a variety of writing tasks. WO-1.3</p>
--	--	---

English Language Arts

	<p>P01. Implement a research strategy that includes:</p> <ul style="list-style-type: none"> a. Selecting appropriate source for a specific research purpose b. Utilizing reference materials (e.g., dictionary, thesaurus, encyclopedia, informational trade books, multimedia sources, Internet) c. Writing a paraphrase of information from a source d. Recording relevant information (e.g., notes, graphs, tables) taken from a research source e. Organizing notes and integrating notes into a finished product. f. Incorporating notes into a finished product <p>9. Prepare and deliver an organized speech and effectively convey the message through verbal and nonverbal communications with a specific audience. WO-1.3</p> <p>10. Prepare and deliver an oral report in a content area and effectively convey the information through verbal and nonverbal communications with a specific audience. WO-1.3</p> <p>11. Interpret and respond to questions and evaluate responses both as interviewer and interviewee. WO-1.4</p>	<p>P01. Implement a research strategy that includes:</p> <ul style="list-style-type: none"> a. Selecting best source for specific research purpose b. Taking notes that summarize and paraphrase c. Information relevant to the topic d. Incorporating notes into a finished product <p>9. Prepare and deliver an organized speech and effectively convey the message through verbal and nonverbal communications with a specific audience. WO-1.3</p> <p>10. Prepare and deliver an oral report in a content area and effectively convey the information through verbal and nonverbal communications with a specific audience. WO-1.3</p> <p>11. Interpret and respond to questions and evaluate responses both as interviewer and interviewee. WO-1.4</p>
--	---	--

Standard 2: Constructing Meaning

All students learn and effectively apply a variety of reading strategies for comprehending, interpreting and evaluating a wide range of texts including fiction, nonfiction, classic, contemporary works and technical texts. **CM-2**

Strand: Reading		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade, students will be able to:</p> <p>1. Use phonetic skills to decode words. CM-2.1</p> <p style="padding-left: 20px;">PO 1. Decode words in context using beginning, middle and final letter/sound relationships.</p> <p>2. Use word recognition and decoding strategies such as phonetic skills, context clues, picture clues, word order, prefixes and suffixes to comprehend written selections. CM-2.1</p> <p style="padding-left: 20px;">PO 1. Derive meaning from written selection using reading/decoding strategies:</p> <p style="padding-left: 40px;">a. phonetic clues b. context clues c. picture clues d. word order e. structural analysis (e.g., prefixes, suffixes) f. word recognition</p> <p>3. Use reading comprehension strategies such as drawing conclusions, summarizing, making predictions, identifying cause and effect, and differentiating fiction from nonfiction. CM-2.4</p> <p style="padding-left: 20px;">PO 1. Draw conclusions based on the text.</p>	<p>By the end of the fifth grade, students will be able to:</p> <p>1. Use structural analysis skills such as identifying root words, prefixes, suffixes and word origins to decode words unfamiliar in print. CM-2.1</p> <p style="padding-left: 20px;">PO 1. Identify root words.</p> <p style="padding-left: 20px;">PO 2. Infer meanings of words in a selection through knowledge of prefixes and suffixes.</p> <p style="padding-left: 20px;">PO 3. Confirm meaning of words using context clues</p> <p>2. Use reading strategies such as making inferences and actions, summarizing, paraphrasing, differentiating fact from fiction, drawing conclusions, determining the author's purpose and perspective to comprehend written selections. CM-2.4</p> <p style="padding-left: 20px;">PO 1. Identify the main ideas; critical and supporting details; and the author's purpose, feelings and point of view on the text.</p> <p style="padding-left: 20px;">PO 2. Distinguish fact from opinion</p> <p style="padding-left: 20px;">PO 3. Summarize the text in own words (assessed at district level only)</p>	<p>By the end of the eighth grade, students will be able to:</p> <p>1. Use structural analysis skills such as identifying root words, prefixes, suffixes and word origins to decode words unfamiliar in print. CM-2.1</p> <p style="padding-left: 20px;">PO 1. Identify the effect of prefixes and suffixes on root words.</p> <p style="padding-left: 20px;">PO 2. Confirm meaning of figurative, idiomatic and technical language using context clues.</p> <p>2. Use reading strategies such as making inferences and actions, summarizing, paraphrasing, differentiating fact from fiction, drawing conclusions, determining the author's purpose and perspective to comprehend written selections. CM-2.4</p> <p style="padding-left: 20px;">PO 1. Identify the main ideas; critical and supporting details; and the author's purpose, feelings and point of view of the text.</p> <p style="padding-left: 20px;">PO 2. Distinguish fact from opinion.</p> <p style="padding-left: 20px;">PO 3. Summarize the text in own words (assessed at district level only)</p>

<p>PO 2. Restate information from a reading selection.</p> <p>PO 3. Predict events, actions and behaviors using prior knowledge and/or details to comprehend a reading selection.</p> <p>PO 4. Identify cause-and-effect relationships.</p> <p>PO 5. Differentiate fiction and nonfiction texts.</p> <p>4. Identify facts and the main idea, sequence events, define and differentiate characters, and determine and author's purpose in a range of traditional and contemporary literature. CM-2.4</p> <p>PO 1. Identify the main idea and relevant facts in a reading selection.</p> <p>PO 2. Sequence as series of events from a reading selection.</p> <p>PO 3. Compare characters (e.g., to inform, to entertain, to persuade, to describe) in a reading selection.</p> <p>5. Analyze selections of fiction, nonfiction and poetry for their literary elements such as character, setting, plot, sequence of events and organization text. CM-2.4</p> <p>PO 1. Compare characters, plot (including sequence of events), settings across reading selections.</p> <p>PO 2. Explain whether the events in the reading selection are real or fantasy.</p>	<p>PO 4. Compare and contrast the text (e.g., characters, genre, culture differences, fact, fiction)</p> <p>PO 5. Determine cause-and-effect relationships.</p> <p>PO 6. Identify the text in chronological, sequential or logical order.</p> <p>PO 7. Make an inference using contextual clues.</p> <p>3. Analyze selections of fiction, nonfiction and poetry by identifying the plot line (i.e., beginning, conflict, rising action, climax and resolution); distinguishing the main character from minor ones; describing the relationships between and motivations of characters; and making inferences about the events, setting, style, tone, mood and meaning of the selection. CM-2.5</p> <p>PO 1. Distinguish the main characters from the minor characters.</p> <p>PO 2. Summarize the plot line to include cause and effect.</p> <p>PO 3. Explain the interaction of major and minor characters in a selection.</p> <p>PO 4. Draw defensible conclusions based on events and settings.</p> <p>PO 5. Differentiate fiction, nonfiction and poetry based on their attributes.</p> <p>PO 6. Explain cause and effect within the plot.</p>	<p>PO 4. Compare and contrast the text (e.g., characters, genre, culture differences, fact, fiction)</p> <p>PO 5. Determine cause-and-effect relationships.</p> <p>PO 6. Summarize in text in chronological, sequential or logical order</p> <p>PO 7. Predict outcome of text.</p> <p>3. Analyze selections of fiction, nonfiction and poetry by identifying the plot line (i.e., beginning, conflict, rising action, climax and resolution); distinguishing the main character from minor ones; describing the relationships between and motivations of characters; and making inferences about the events, setting, style, tone, mood and meaning of the selection. CM-2.5</p> <p>PO 1. Describe the settings and its relationship to the selection.</p> <p>PO 2. Describe the motivation of major and minor characters in a selection.</p> <p>PO 3. Draw defensible conclusions, based on stated and implied information according to style, meaning and mood.</p> <p>PO 4. Differentiate fiction, nonfiction or poetry based on their attributes.</p> <p>PO 5. Identify the theme</p>
--	---	--

PO 3. Describe structural elements of poetry (e.g., rhyme, rhythm, repetition)

PO 4. Describe the literary elements of fiction and nonfiction.

6. Read and comprehend consumer information such as forms, newspaper ads, warning labels and safety pamphlets. **CM-2.5**

PO 1. Explain the meaning of specific signs (e.g., traffic, safety, warning)

PO 2. Restate information found in consumer literature (e.g., safety pamphlets, newspapers, catalogs)

PO 3. Compare information in written advertisements.

PO 4. Fill out a variety of forms (e.g., contest entry, requests for information)

7. Follow a list of directions and evaluate those directions for clarity. **CM-2.3**

PO 1. Identify similarities and differences relating to theme, plot, setting, character and point of view in literature from different cultures.

PO 2. Compare real-life experiences to events, characters and conflicts in literary selections from different cultures.

PO 3. Recognize that some words in literary selections come from a variety of cultures.

4. Identify the author's purpose, position, bias and strategies in a persuasive selection. **CM-2.4**

PO 1. Identify the author's purpose and use of details to support the purpose.

PO 2. Describe the author's use of strategies to convince or persuade:
a. bandwagon
b. peer pressure
c. "loaded" words

PO 3. Identify the author's bias.

5. Evaluate an instructional manual such as assembly directions or user's guide for clarity and completeness. **CM-2.7**

PO 1. Identify the components of an instructional manual (e.g., directions, tools required, parts needed, illustrations, diagram sequence, bold face for relevant steps)

PO 2. Incorporate information from the illustrations.

PO 3. Locate support help in manual or from the manufacturer.

PO 4. Identify the sequence of activities needed to carry out a procedure.

PO 5. Identify information that is either extraneous or missing (e.g., directions, tools required, parts needed, illustrations, diagram sequence, bold face for relevant steps).

4. Identify the author's purpose, position, bias and strategies in a persuasive selection. **CM-2.4**

PO 1. Identify the author's purpose and use of details to support the purpose.

PO 2. Describe the author's use of strategies to convince or persuade:
a. bandwagon
b. peer pressure
c. "loaded" words

PO 3. Identify the author's bias.

5. Evaluate an instructional manual such as assembly directions or user's guide for clarity and completeness. **CM-2.7**

PO 1. Identify the components of an instructional manual (e.g., directions, tools required, parts needed, illustrations, diagram sequence, bold face for relevant steps)

PO 2. Incorporate information from the illustrations.

PO 3. Locate support help in manual or from the manufacturer.

PO 4. Identify the sequence of activities needed to carry out a procedure.

8. Develop an increasing extensive vocabulary and actively seek the meaning of unknown words as an important facet of comprehending text.

CM-2.8

PO 1. Use context clues to determine the meanings of words.

PO 2. Use reference works, technology, and human resources to learn the meaning of unknown words (e.g., dictionaries, computer software)

6. Compare and contrast the historical and cultural perspectives of literary selections.

CM-2.6

PO 1. Compare one author's perspective of a historical character, setting or event with another historical or contemporary literary selection (e.g., essays, autobiographies, fiction, nonfiction)

PO 2. Compare the lives and experiences of characters in history to present-day individuals who have similar goals or face similar challenges.

PO 3. Compare versions of traditional or contemporary literature from different cultures for similarities and differences related to theme, plot, character, setting and point of view.

7. Self-monitor comprehension while listening, reading, and viewing. **CM-2.3**

PO 1. Generating a purpose for reading, listening, or viewing.

PO 2. Assimilating information with prior knowledge to revise predictions and understandings, and make inferences.

PO 3. Taking appropriate actions (e.g., rereading to make sense, adjusting rate of reading, seeking the meaning of unknown vocabulary) to enhance understanding of oral and written text

PO 5. Identify information that is either extraneous or missing (e.g., directions, tools required, parts needed, illustrations, diagram sequence, bold face for relevant steps).

6. Compare and contrast the historical and cultural perspectives of literary selections.

CM-2.6

PO 1. Compare one author's perspective of a historical character, setting or event with another historical or contemporary literary selection (e.g., essays, autobiographies, fiction, nonfiction)

PO 2. Compare the lives and experiences of characters in history to present-day individuals who have similar goals or face similar challenges.

PO 3. Compare versions of traditional or contemporary literature from different cultures for similarities and differences related to theme, plot, character, setting and point of view.

7. Self-monitor comprehension while listening, reading, and viewing. **CM-2.3**

PO 1. Generating a purpose for reading, listening, or viewing

PO 2. Assimilating information with prior knowledge to revise predictions and understandings, and make inferences.

	<p>8. Develop an increasing extensive vocabulary and actively seek the meaning of unknown words as an important facet of comprehending text. CM-2.8</p> <p>PO 1. Use context clues to determine the meanings of words.</p> <p>PO 2. Use reference works, technology, and human resources to learn the meaning of unknown words (e.g., dictionaries, computer software)</p>	<p>PO 3. Taking appropriate actions (e.g., rereading to make sense, adjusting rate of reading, seeking the meaning of unknown vocabulary) to enhance understanding of oral and written text</p> <p>8. Develop an increasing extensive vocabulary and actively seek the meaning of unknown words as an important facet of comprehending text. CM-2.8</p> <p>PO 1. Use context clues to determine the meanings of words.</p> <p>PO 2. Use reference books, technology, and human resources to learn the meaning of unknown words (e.g., dictionaries, computer software)</p>
--	---	---

Language Arts

Standard 3 Analytical Reading, Listening, Viewing and Technology

All students will become proficient in analytical reading, listening and viewing using traditional printed sources and technology.
DEL-ARLVT3

Strand:		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of third grade students will be able to:</p> <p>1. Access, organize, and evaluate information gained by listening, reading, and viewing.</p> <p>P01. Identify, locate, and select sources of information relevant to a defined need:</p> <p>a. With direct teacher assistance, students will</p> <ol style="list-style-type: none"> 1. Identify and locate a variety of sources including printed materials, personal interviews, oral reporting, forums, and technological forms of information; 2. Use procedures to gather information and ideas. <p>b. Independently, extract information to achieve a specific purpose.</p> <p>P02. Organize, manipulate, and express the information and ideas relevant to a defined need:</p>	<p>By the end of the fifth grade students will be able to:</p> <p>P01. Identify, locate, and select sources of information relevant to a defined need:</p> <p>a. With teacher guidance, student will</p> <ol style="list-style-type: none"> 1. Identify and locate a variety of sources including printed materials, personal interviews, oral reports, forums, and technological forms of information; 2. Use procedures to gather information and ideas. <p>b. Independently, extract information to achieve a specific purpose.</p> <p>P02. Organize, manipulate, and express the information and ideas relevant to a defined need:</p>	<p>By the end of the eighth grade students will be able to:</p> <p>P01. Identify, locate, and select sources of information relevant to a defined need:</p> <p>a. With support from the teacher as a resource and facilitator, students will</p> <ol style="list-style-type: none"> 1. Use a variety of sources including printed materials, personal interviews, oral reports, forums, and technological forms of information; 2. Develop and use procedures to gather information and ideas. <p>b. Independently, extract information relevant to a specific purpose.</p> <p>P02. Organize, manipulate, and express the information and ideas relevant to a defined need:</p>

Language Arts

<p>a With direct teacher assistance, students will</p> <ol style="list-style-type: none"> 1. Follow a process for research completion; 2. Use technology to synthesize information into a meaningful format to express ideas and experiences, and to create text, drawings, graphs, diagrams, photographs, videos and graphics. <p>b. Independently, students will present information, which is sufficient in quantity and depth to achieve a specific purpose.</p>	<p>a With teacher guidance, students will</p> <ol style="list-style-type: none"> 1. Develop and follow a process for research completion; 2. Use technology to synthesize information into a meaningful format to express ideas and experiences, and to create text, drawings, graphs, diagrams, photographs, videos, and graphics. <p>b. Independently, students will present information, which is sufficient in quantity and depth to achieve a specific purpose, avoiding plagiarism.</p>	<p>a With support from the teacher as a resource and facilitator students will</p> <ol style="list-style-type: none"> 1. Develop and follow a process for research completion. 2. Use technology to synthesize information into a meaningful format to express ideas and experiences, and to create text, drawings, graphs, diagrams, photographs, videos, and graphics. <p>b. Independently, present information, which is sufficient in quantity and depth to achieve a specific purpose, avoiding plagiarism</p>
<p>P03. Evaluate both sources and information:</p> <p>a. With direct teacher assistance, students will</p> <ol style="list-style-type: none"> 1. Establish criteria to use to differentiate between authoritative and non-authoritative sources; 2. Establish criteria by which sources and information can be analyzed for accuracy, bias, stereotypes, and validity. <p>b. Independently, draw conclusions based upon information relevant to a specific purpose.</p>	<p>P03. Evaluate both sources and information</p> <p>a. With teacher guidance, students will</p> <ol style="list-style-type: none"> 1. Select sources which are authoritative; 2. Analyze sources and information for accuracy, bias, stereotypes, and validity. <p>b. Independently, draw conclusions based upon information relevant to a specific purpose</p>	<p>P03. Evaluate both sources and information:</p> <p>a With support from the teacher as a resource and facilitator, students will</p> <ol style="list-style-type: none"> 1. Select sources which are authoritative 2. Analyze sources and information for accuracy, bias, stereotypes, and validity. <p>b. Independently,</p> <ol style="list-style-type: none"> 1. Interpret information as appropriate to a specific purpose; 2. Formulate logical conclusions based upon information relevant to a specific purpose.

Standard 4: Literature

All students will read and analyze a wide variety of classic and contemporary literature to seek information, ideas, enjoyment and understanding of their individuality, our common humanity, and the rich diversity in our society. **DEL-L.4**

Strand: Using Literary Knowledge		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the completion of third grade, using literature appropriate for age, stage, and interests, students will be able to:</p> <p>PO 1. Connect their own experiences to those of literary characters by: L4.1</p> <ol style="list-style-type: none"> Explaining the reasons for a character's actions. Responding to the sensory, intellectual, and emotional elements of literature. Understanding the feelings of characters of varying genders, races, and disabilities. relating incidents in the text or media to life's experiences. Seeking other literary texts and media as the result of literary experience. <p>PO 2. Respond to literary text and media using interpretive, critical, and evaluative processes by: L4.2</p> <ol style="list-style-type: none"> Making inferences about content, events, characters, settings. Identifying the differences between genre. 	<p>By the completion of fifth grade, using literature appropriate for age, stage, and interests, students will be able to:</p> <p>PO 1. Connect their own experiences to those of literary characters by: L4.1</p> <ol style="list-style-type: none"> Explaining the reasons for a character's actions. Responding to the sensory, intellectual, and emotional elements of literature. Understanding the feelings of characters of varying genders, races, and disabilities. relating incidents in the text or media to life's experiences. Seeking other literary texts and media as the result of literary experience. <p>PO 2. Respond to literary text and media using interpretive, critical, and evaluative processes by: L4.2</p> <ol style="list-style-type: none"> Making inferences about content, events, characters, settings. Identifying the differences between genre. 	<p>By the completion of eighth grade, using literature appropriate for age, stage, and interests, students will be able to:</p> <p>PO 1. Connect their own experiences to those of literary characters by: L4.1</p> <ol style="list-style-type: none"> Explaining the reasons for a character's actions. Responding to the sensory, intellectual, and emotional elements of literature. Understanding the feelings of characters of varying genders, races, and disabilities. relating incidents in the text or media to life's experiences. Seeking other literary texts and media as the result of literary experience. <p>PO 2. Respond to literary text and media using interpretive, critical, and evaluative processes by: L4.2</p> <ol style="list-style-type: none"> Making inferences about content, events, characters, settings. Identifying the differences between genre.

PO 3. Demonstrate an appreciation for a broad range of culturally diverse literary texts and media created by historical, modern, and contemporary authors through:

L4.3

- a. Responding to literary texts and media representing the diversity of American cultural heritage inclusive of ages, genders, nationalities, races, religions, and disabilities.
- b. Responding to literary texts and media representative of various nations and cultures.

PO 4. Apply knowledge gained from literature as a basis for understanding self and society by: **L4.4**

- a. Using Literature as a resource for shaping decisions.
- b. Using literature as a resource for understanding social issues.

PO 3. Demonstrate an appreciation for a broad range of culturally diverse literary texts and media created by historical, modern, and contemporary authors through:

L4.3

- a. Responding to literary texts and media representing the diversity of American cultural heritage inclusive of ages, genders, nationalities, races, religions, and disabilities.
- b. Responding to literary texts and media representative of various nations and cultures.

PO 4. Apply knowledge gained from literature as a basis for understanding self and society by: **L4.4**

- a. Using Literature as a resource for shaping decisions.
- b. Using literature as a resource for understanding social issues.

PO 3. Demonstrate an appreciation for a broad range of culturally diverse literary texts and media created by historical, modern, and contemporary authors through:

L4.3

- a. Responding to literary texts and media representing the diversity of American cultural heritage inclusive of ages, genders, nationalities, races, religions, and disabilities.
- b. Responding to literary texts and media representative of various nations and cultures.

PO 4. Apply knowledge gained from literature as a basis for understanding self and society by: **L4.4**

- a. Using Literature as a resource for shaping decisions.
- b. Using literature as a resource for understanding social issues.

Standard 1: Civics

Students will examine the structure and purpose of governments with specific emphasis on constitutional democracy. (DEL- SS1)

Strand: Government		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade, students will be able to:</p> <ol style="list-style-type: none"> Demonstrate an understanding that leaders are sometimes chosen by election, and those elected officials are expected to represent the interests of the people who elected them. (SS1-1.1) PO1. After reading or listening to a demonstration of how a person in authority gained his/her office, students will identify the means of selection as either election, appointment, or family-related. Understand that positions of authority, whether elected, appointed, or familial, carry responsibilities and should be respected. (SS1-1.2) PO1. Write a job description for teachers and students, which demonstrates an understanding of basic responsibilities. Understand that respect for others, their opinions, and their property is a foundation of civil society in the United States. (SS1-1.3) 	<p>By the end of the fifth grade, students should be able to:</p> <ol style="list-style-type: none"> Demonstrate an understand that governments have a variety of structures and exist for many purposes and that in America these are explained in the United States and State Constitutions. (SS-1.1) PO1. Create a diagram, which explains the structure of the Federal government under the U.S. Constitution. PO2. Explain the purpose of the Preamble to the Constitution. Understand that the United States government is divided into executive, legislative, and judicial branches, each with specific responsibilities and powers. (SS1-1.2) PO1. Research current members of the three branches of government write the responsibility of each. 	<p>By the end of the eighth grade, students should be able to:</p> <ol style="list-style-type: none"> Understand the governments have the power to make and enforce laws and regulations, levy taxes, conduct foreign policy, and make war. (SS- 1.1) Analyze the different functions of federal, state, and local governments in United States and examine the reasons for the different organizational structures each level of government employs. (SS-2.1) PO1. Investigate the kinds of laws and Regulations that local, state, and federal governments enact. Given a list of possible laws, students would break up into groups and research which level of government was the appropriate one to deal with the issue. PO2. Compare the manner in which a head of state acquires power in different political systems (e.g., President of the United States, Chairman of the Communist Party in the People's Republic of China)

Curriculum Assessment
Social Studies

Standard 2: Civics

Understand the principles and ideals underlying the American political system. (DE1, SS2)

Strand: Politics Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade, students will be able to:</p>	<p>By the end of the fifth grade, students should be able to:</p> <ol style="list-style-type: none"> 1. Explain that the principle of "due process" means that the government must follow its own rules when taking actions against a citizen. (SS-2.1) PO1. Analyze the Bill of Rights to see how extensive a list of rights they can find in the first ten amendments. PO2. Discuss school and classroom rules as the basis for investigating the concept of due process. The students would try to determine what responsibilities these rules place on those who enforce them (e.g., to hear witnesses; investigate evidence fairly, allow an appeal of decisions). They would then try to figure out how not having due process rights weakens all other rights. 2. Understand that a society based on the ideal of individual liberty requires a commitment on the part of its citizens to the principles of civic responsibility and personal civility. (SS-2.2) PO1. During any election year, students could break into groups and research the background and positions of candidates in national, state, and local elections. Each student or group of students would be made responsible for compiling a scrapbook containing campaign paraphernalia and news items concerning that candidate. Students would each be required to prepare and present a speech, song, or ad which would 	<p>By the end of the eighth grade, students should be able to:</p> <ol style="list-style-type: none"> 1. Understand that the concept of majority rule does not mean that the rights of minorities may be disregarded and will examine and apply the protections accorded those minorities in the American political system. (SS- 2.1) 2. Understand the principles and content of major American state papers such as the Declaration of Independence; United States Constitution (including the Bill of Rights); and the Federalist Papers. (SS-2.2) PO1. Examine the Constitution and the Bill of Rights to determine which safeguards protect political rights, and which ones protect property. PO2. Interview family members to find out what political and property rights protections they enjoy under the Constitution and Bill of Rights. Using this information they might write a story about their family's life if one or more of these protections did not exist. PO3. Examine the Delaware State Constitution and note the similarities and differences between that document and the U.S. Constitution; based on knowledge of the federal system they might suggest some reasons for these differences



Standard 3: Civics

Students will understand the responsibilities, rights, and privileges of United States citizens. (DEL- SS3)

Strand: Citizenship		
<p style="text-align: center;">Early Elementary K-3</p> <p>By the end of the third grade, students will be able to:</p> <ol style="list-style-type: none">1. Understand the American citizens have distinct responsibilities such as voting rights such as free speech freedom of religion and privileges such as driving. (SS-3.1) PO1. After interviewing or listening to two people presenting opposing viewpoints on some issue, students could be asked to summarize each position. PO2. Through role-playing, art, or other demonstrations, students could show how acts like theft or vandalism hurt other people, and explain why they are wrong.	<p style="text-align: center;">Late Elementary 4-5</p> <p>By the end of the fifth grade, students should be able to:</p> <ol style="list-style-type: none">1. Identify the fundamental rights of all American citizens as enumerated in the Bill of Rights. (SS-3.1) PO1. Identify individuals and/or groups within their community who work for the common good on a voluntary basis (civic associations; booster clubs; hospital volunteers, church charities; volunteer fire and rescue workers) and describe the contributions made, as well as the reasons people give for volunteering their time.2. Apply the protections guaranteed in the Bill of Rights to an analysis of everyday situations. (SS-3.2) PO1. Parent Partnership Project: Students might take a list of classroom rules and responsibilities home and sit down with their parents to compare them with home rules and responsibilities. This would prompt student discussions of similarities and differences between the two sets of rules.	<p style="text-align: center;">Middle 6-8</p> <p>By the end of the eighth grade students should be able to:</p> <ol style="list-style-type: none">1. Understand that civil rights secure political freedom while property rights secure economic freedom and that both are essential protections for United States citizens. (SS-3.1)2. Understand that American citizenship includes responsibilities such as voting, jury duty, obeying the law, service in the armed forces when required, and public service. (SS-3.2) PO1. Participate in a class debate to explore "What does it take to make a good citizen?" PO2. Interviewing parents on "What does it take to make a good citizen?" and develop a list of parental answers in order to search for common characteristics. PO3. Write essays concerning one or two responsibilities which explain the reasons why citizens should perform a specific responsibility (e.g. voting) and the consequences of large segments of the population not doing so.

Standard 4. Civics

Students will develop and employ the civic skills necessary for effective, participatory citizenship. (DEL-SS4)

Strand: Participation Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade, students will be able to:</p> <p>1. Students will acquire the skills necessary for participating in a group, including defining an objective, dividing responsibilities, and working cooperatively. (SS-4.1) PO1. Explain several ways in which a group could choose a leader (taking turns, drawing straws, voting, consensus), and demonstrate each process through role-play. PO2. Participate in a cooperative group charged with a specific responsibility (planning a class activity, organizing materials for a project, etc.) After completing the task, each student would be asked to describe the contribution made by every group member, as well as the process or rules used for work assignments, decision-making, and reporting.</p>	<p>By the end of the fifth grade, students should be able to:</p> <p>1. Identify and employ the formal and informal methods by which democratic groups function. (SS-4.1) PO1. Conduct a public opinion survey in the school or community on an issue of local, state, or national interest, express the results in graphic form, and report the results in a news article, video presentation, or oral report.</p> <p>2. Understand that in order to select effective leaders, citizens have to become informed about candidates' qualifications and the issues of the day (SS-4.2) PO1. Students might organize their class, elect officers, select standing committees with an on-going responsibilities, and special committees for specific projects; they might also elect a representative to student council. Each student selected for a position would be responsible for developing a job description and providing periodic reports of their progress to classmates. PO2. Parent Partnership Project: Students might attend a school board or local government meeting with a parent and give a report on the event.</p>	<p>By the end of the eighth grade, students should be able to:</p> <p>1. Follow the actions of elected officials, and understand and employ the mechanisms for communicating with them while in office. (SS-4.1) PO1. Select an important political issue (e.g., health care, income taxes, environment, etc.). Then examine news reports to find out what position different office-holders take on the issue; research the issue and prepare a letter to one of the office-holders advocating a particular course of action. PO2. Develop a questionnaire on a given political issue which would be used in interviewing family and neighbors, or even use the same questions reported in newspaper or television polls in order to compare the results.</p>

Standard 2: Economics

Students will analyze the potential costs and benefits of personal economic choices in a market economy. (DEL- SS2)

Strand: Microeconomics		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade, students will be able to:</p> <ol style="list-style-type: none"> Understand that individuals and families with limited resources undertake a wide variety of activities to satisfy their wants. (SS- 2.1) PO1. List as many strategies as possible that families might use to acquire food (work for money and buy at the supermarket; garden; fish and hunt, etc.); and then identify which of these strategies would be more likely to be pursued in rural, urban, or suburban area. PO2. Apply the concept that economic choices require balancing of costs incurred. PO3. Using a price list provided by the teacher, each student might be asked to prepare a budget for a classroom party with fixed maximum expenditure. After listening to the plans of classmates, the student might be asked to identify what each person valued most on the menu, and what items were "given up" in order to stay within the budget. 	<p>By the end of the fifth grade, students should be able to:</p> <ol style="list-style-type: none"> Explain that prices in a market economy are determined by the interaction of supply and demand, with governments intervening to deal with market failures. (SS- 2.1) PO1. Using the "mini-society" model, students might be asked to decide on a product to produce and sell within the classroom market. Explain that consumers and producers make economic choices based on supply, demand, access to markets, and the actions of the government. (SS-2.2) PO1. Design a survey to find out how many times a week the average student buys a certain commodity (ice cream, video rentals, etc.), and then draw a conclusion about how these rates of purchase would be affected if the price increased by 10%, 50%, or 100%. 	<p>By the end of the eighth grade, students should be able to:</p> <ol style="list-style-type: none"> Analyze how changes in technology, costs and demand interact in competitive markets to determine or change the price of goods and services.(SS- 2.1) PO1. Working in teams, students will imagine that they were Europeans living in the 17th or 18th centuries. They would study the economic resources of the various American colonies in order to gather information to create a promotional campaign to convince their neighbors to leave for a particular colony.

K-8
Curriculum Alignment
Social Studies

Standard 2: Economics

Students will examine the interaction of individuals, families, communities, business, and government in a market economy (DEI- SS2)

Strand: Macroeconomics		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade, students will be able to:</p> <ol style="list-style-type: none"> 1. Understand how barter, money, and other media are employed to facilitate the exchange of resources, goods, and services. (SS- 2.1) PO1. Participate in a classroom simulation where in students use scrip, chip or other symbols for trade. PO2. Generate and compare a list of needs and wants for a family in their area. Then compare it with lists for families from other regions. 	<p>By the end of the fifth grade, students should be able to:</p> <ol style="list-style-type: none"> 1. Understand the role of the bank and other financial institutions in the economy. (SS- 2.1) PO1. Participate in a "mini-society" project. (Barter Day) on which no money is used. Discuss the impact barter has on banks. PO2. Describe the costs and benefits of government regulations on the production of goods and services. PO3. Investigate the various taxes used to provide support for local schools, and for each tax suggest a possible effect the tax might have on personal economics decisions (e.g., high property taxes might discourage home ownership) in order to examine the application of cost-benefit analysis to government policy-making. 	<p>By the end of the eighth grade, students should be able to:</p> <ol style="list-style-type: none"> 1. Analyze the role of money and banking in the economy, and the ways in which government taxes and spending affect the functioning of market economies. (SS- 2.1) PO1. Gather information concerning the economic cost of homelessness to their city or town, and then research various potential policies for reducing or eliminating the problem. PO2. Interview household members in order to determine the prices at which parents, grandparents, or other family members purchased specified goods when they were teenagers. Compare the costs of being a teenager today with that being a teenager in the past.

Standard 2: Economics

Students will examine the interaction of individuals, families, communities, business, and government in a market economy. (DEL- SS2)

Strand: Economic Systems		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade, students will be able to:</p> <p>1. Identify human wants and the various resources and strategies which have been used to satisfy them over time.(SS- 2.1) PO1. Participate in a group to produce a product that someone would want. Students would answer basic economic questions due to scarcity; WHAT, HOW, and FOR WHOM. PO2. Discuss the importance of special classroom jobs, and how each student who performs a specific job is a specialist producing a service the class needs.</p>	<p>By the end of the fifth grade, students should be able to:</p> <p>1. Identify different means of production, distribution, and exchange used within economic systems in different times and place.(SS- 2.1) PO1. Participate in a class activity. The teacher might bring one candy bar to class and ask how many students would like to eat it. When students discovered that scarcity existed—the wants for the candy bar are greater than the resources—they would have to offer possible solutions to the problem. PO2. Explain the means of production, distribution, and exchange of agricultural commodities and manufactured products in use in Delaware during colonial times might be contrasted with those employed today.</p>	<p>By the end of the eighth grade, students should be able to:</p> <p>1. Demonstrate the ways in which the means of production, distribution, and exchange in different economics systems have a relationship to cultural values, resources, and technologies.(SS- 2.1) PO1. Gather information and evaluate data from various sources to describe the economy of a particular nation. Use the data to make a case for classifying the economy as market, mixed, or command. PO2. Develop a set of questions, which might be used to make a comparison between different types of economies and gather economic data to answer these questions (e.g., U.S. and Sweden; Taiwan and the People's Republic of China). PO3. Interview household members in order to determine the prices at which parents, grandparents, or other family members purchased specified goods when they were teenagers. Compare the costs of being a teenager today with that being a teenager in the past.</p>

Standard 2 Economics

All students will examine the patterns and results of international trade. (DEL- SS2)

Strand: International Trade		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade, students will be able to:</p> <ol style="list-style-type: none"> Understand that the exchange of goods and services around the world creates economic interdependence between people in different places.(SS-2.1) PO1. Participate in a class activity to determine where specific commodities (shirts, shoes, jewelry, etc.) were made. Use a world map to find and location from which each of the commodities is produced. 	<p>By the end of the fifth grade, students should be able to:</p> <ol style="list-style-type: none"> Demonstrate how international trade links countries around the world and can improve the economic welfare of nations.(SS- 2.1) PO1. Examine the goods and service produced within the American colonies prior to the Revolutionary War, and then evaluate the various restrictions on trade which were part of the British colonial relationship with the colonies. PO2. Create maps and charts which demonstrated how this policy might benefit individuals and businesses if Great Britain and limit economic choices in the colonies. PO3. Use the maps and charts to address the question of who benefited most from the policies, who the least. 	<p>By the end of the eighth grade, students should be able to:</p> <ol style="list-style-type: none"> Examine how nations with different economic systems specialize and become interdependent through trade and how government policies allow either free or restricted trade.(SS- 2.1) PO1. Sketch maps of one of the world's regions from memory (these maps need not be precise in boundaries or scale, but should display correct relative location between features shown). PO2. Explain the possible reasons for differences among a set of world maps drawn from memory by students from the different parts of the world. PO3. Apply their knowledge of the world's regions to identify the probable location of landscapes displayed in a set of photographs or satellite images, and then provide reasons for the location chosen. PO4. Plot an explorer's (or modern traveller's) route on a map, using a list of locations described only by latitude and longitude.

Standard 3: Geography

All students will develop a personal geographic framework, or "mental map" and understand the uses of maps and other geo-graphics. (SCI - SSI)

Strand: Maps		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade students will be able to:</p> <p>1. Demonstrate an understanding of the nature and uses of maps, globes, and other geo-graphics. (SS -3.1)</p> <p>PO1. Compare air photos with different kinds of maps of the local area (road map, topographical map, population distribution map) to compare uses and understand map-making techniques.</p> <p>PO2. Create a "history" map of their lives marking their birthplace, different places they have lived, and places to which they have traveled. Different colored stars or other symbols could be utilized to identify categories in places.</p> <p>PO3. Use a map and follow a directed route through the local community of their school, which would help them understand the use of compass point and map scale.</p> <p>PO4. Using spherical object, such as balloons or styrofoam balls, construct a globe, and label the equator, the pole, the prime meridian, and the continents and oceans.</p> <p>PO5. Make a map from memory of the journey to school (or the journey from classroom to the cafeteria), and then compare that map with those of other students to discuss how each is different and why certain features may be common.</p>	<p>By the end of the fifth grade students will be able to:</p> <p>1. Development of mental maps of Delaware and of the United States which include the relative location and characteristics of major physical features, political divisions, and human settlements. (SS -3.1)</p> <p>PO1. Identify on an outline map major features of the physical environment, such as major river systems, oceans and seas, mountain systems, deserts, plateaux, and plains for the United States and for Delaware.</p> <p>PO2. Identify on an outline map important human settlements and political divisions within the United States and Delaware.</p> <p>PO3. Sketch maps of Delaware and the United States from memory. The maps need not display precise boundaries or uniform scale, but should correctly identify the relative location of features.</p> <p>PO4. Demonstrate and/or explain the relationship between maps and globes, and explain why all maps are distorted images of the information displayed on the globe.</p>	<p>By the end of the eighth grade students will be able to:</p> <p>1. Demonstrate mental maps of the world and its sub-regions which include the relative location and characteristics of major physical features, political divisions, and human settlements. (SS -3.1)</p> <p>PO1. Produce rough sketch maps of one of the worlds regions from memory (these maps need not be precise in boundaries or scale, but should display correct relative location between features shown).</p> <p>PO2. Explain the possible reasons for differences among a set of world maps drawn from memory by students from different parts of the world.</p> <p>PO3. Apply their knowledge of the world's regions to identify the probable location of landscapes displayed in a set of photographs or satellite images, and then provide reasons for the locations chosen.</p> <p>PO4. Plot an explorer's (or modern traveler's) route on a map, using a list of locations described only by latitude and longitude.</p>

Standard 3: Geography

All students will develop a knowledge of the ways humans modify and respond to the natural environment. (SC1 – SS2)

Strand: Environment		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade students will be able to:</p> <ol style="list-style-type: none"> Distinguish different type of climate and landforms and explain why they occur. (SS – 3.1) PO1. Create a model or drawings of various landforms (mountain, hill, river, plain, etc.) and explain in simple terms how features were formed. PO2. Observing differences in weather patterns over a long period of time, create a graph to describe the observed differences. PO3. Investigate ways water is used today, and where water comes from. They would then compare this information with water use and sources of water in the past. PO4. Enlist their parents and other family members in recording home water usage for several days, and compare their families' usage with state and national averages. PO5. Classifying a series of photos by climate region, students might be asked to identify vegetation, animal life, types of human activity, and topographic features likely to be found in each climate region. 	<p>By the end of the fifth grade students will be able to:</p> <ol style="list-style-type: none"> Apply a knowledge of topography, climate, soils, and vegetation of Delaware and the United States to understand how human society alters, and is affected by, the physical environment. (SS –3.1) PO1. Compare early and modern maps of any major port city or prominent coastal feature, such as Cape Henlopen, and offer reasons for the changes in waterfront or coastline over time. PO2. Match pictures of different types of vegetation with a United States map of climates. In selecting the best location for various economic activities or sporting events, students would be expected to base their decisions on data from topographic or climate maps, climographs, statistical data, etc., and give reasons for the site selected. (SS – 3.2) 	<p>By the end of the eighth grade students will be able to:</p> <ol style="list-style-type: none"> Apply a knowledge of major processes shaping natural environments to understand how different people have changed and been affected by, physical environments in the world's sub-regions. (SS- 3.1) PO1. Which shape topography (tectonic forces and erosion) and climate (dispersal of solar energy in the atmosphere and oceans) to explain the characteristics of the local environment. PO2. Describe how the Earth is moved and reshaped by river and streams, or how the atmosphere and oceans are interrelated. PO3. Explain the causes of monsoon seasons (or other distinctive climate occurrence) and identify the parts of the world where they occur. PO4. Compare with a map of tectonic plates and explain the reasons for the close association of the two maps. PO5. Examine agricultural practices in several of the world's sub-regions in order to identify practices which affect the environment through erosion by wind and water, depleting underground reserves, cutting down forests, etc., to identify practices which conserve water and topsoil.

Standard 3: Geography

All students will develop an understanding of the diversity of human culture and the unique factor of places. (SC1 – SS3)

Strand: Places		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade students will be able to:</p> <p>1. Identify types of human settlement, connections between settlements, and types of activities found in each. (SS – 3.1) PO1. Use photos, movie clips, books and other material to gather information about cities, towns, suburban settlement and rural areas in the United States and around the world. They would then describe the size building and styles, economic and cultural activity of each type of settlement. PO2. Parent Partnership Project: Students could map trips to other settlements taken by their families of students in the class during the past month, gather information about the reasons of travel, and deduce the settlements depending upon each other. PO3. Comparing photographs of small towns and villages in various regions of the United States, students might identify the ways in which they are distinctive.</p>	<p>By the end of the fifth grade students will be able to:</p> <p>1. Understand the reasons for the locations of human activities and settlements and the routes connecting them in Delaware and in the United States. (SS – 3.1) PO1. Explain how the founders of a settlement might have evaluated a site in terms of its resources and environmental characteristics relative to their needs and availability of technology. (e.g., its proximity to resources, markets opportunities, etc.) PO2. Describe how changing technology, resources, etc. can affect settlements, and how places compete to maintain their importance under changing conditions. PO3. Compare a map of Colonial trade in Delaware with a present day map, students might explain changes in road patterns, water transport patterns, port facilities, and settlements in terms of changing technology. PO4. Sketch maps of the same area e.g., school and neighborhood, and then compare the maps and discuss the reasons why perceptions of the same place differ. PO5. Examine a map of population distribution in Delaware, or the United States, and offer reasons for areas of dense and relatively sparse settlement</p>	<p>By the end of the eighth grade students will be able to:</p> <p>1. Identify and explain the major cultural patterns of human activity in the world's sub-regions. (SS – 3.1) PO1. Using thematic maps of religion, language, political affiliation, and economic activity to identify places with similar culture, students could draw boundaries around these places and explain origin of these distinctive cultures. PO2. Use the concept of cultural hearth and map the direction of intensity of the spread of cultural traits to surrounding places. PO3. Prepare a briefing paper for a company about to send employees overseas. PO4. Use the internet to obtain descriptions by people in different parts of the world of what they mean by common words about places, such as "beautiful" or "ugly", students could compare these descriptions and explain reasons for the different ideas about places. PO5. Map the openings of a movie in the worlds major cities and contrast the ways cultural diffusion occurs today with the methods of cultural spread in the past.</p>

Standard 3: Geography

All students will develop an understanding of the diversity of human culture and the unique factor of places. (SCI – SS3)

Strand: Regions		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade students will be able to:</p> <p>1. Use the concepts of place and region to explain simple patterns of connections between and among places across the country and the world. (SS – 3.1) PO1. Use maps of the world climate regions to predict the type of clothing, housing, outdoor activity, etc., which might be found in a specified area. Investigate through references to see if those predictions are correct. PO2. Gather evidence of interaction between their hometowns and other places in the world, such as clothing worn, mail received, goods in stores, etc. Map the information and use simple concepts of distance, direction, available means of transport, and cultural or historical association between places. Explain the mapped patterns which emerge.</p>	<p>By the end of the fifth grade students will be able to:</p> <p>1. Apply geographic skills to develop a profile of the local community by placing it in context of physical, cultural, and other types of regions. (SS – 3.1) PO1. Explain changes in the use of land in a community over time, using air photos, historical documents, interviews with representative citizens, etc., in order to determine what makes the community distinctive, or similar to others in the region. PO2. Compile a list of local businesses and services; then map a selection and explain their location in terms of why some establishments cluster, and others are attracted to locate next to their markets or other suppliers. PO3. Compare the home places to immigrants to Delaware, either today or in the past, with the profile of the local area. They would then identify adjustments individuals or families might have to make in moving from one region to another. PO4. Write a story about the consequences for the community if it was completely cut off for three days from the rest of the world: no fuel, no food from the outside, no mail, etc. PO5. Using an atlas, students might develop a list of characteristics which apply to the local region (rainfall patterns, population distribution, topography, etc.) and find other regions in the world with similar characteristics.</p>	<p>By the end of the eighth grade students will be able to:</p> <p>1. Develop an understanding of the character and use of regions and the connections between and among them. PO1. Understand the process affecting the location of economic activities in different world regions. PO2. Explain how cooperation and conflict among people contributes to the division of the Earth's surface into distinctive cultural regions and political territories. PO3. Map the location of different types of economic activities (agriculture, industry, services) and draw boundaries lines to decide where regions of common economic activity are found. PO4. Use news reports, historical data, thematic maps, resource surveys and aerial photos to report on a current border dispute between nations. PO5. Select an international regional cooperative venture, such as an international river navigation system, and identify the advantages and pitfalls of such ventures for the parties involved.</p>

Standard 4: History

All students will employ chronological concepts in analyzing historical phenomena. (DE1.- SS1)

Strand: Chronology		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade, students will be able to</p> <ol style="list-style-type: none"> 1. Use clocks, calendars, schedules, and written records to record or locate events in time. (SS-4.1) <ul style="list-style-type: none"> PO1. Record temperature readings, as well as observations of clouds and weather conditions over several months and draw conclusions about general trends based on their observations. PO2. Retell or dramatize a story with the events in the correct sequence. PO3. Construct a travel itinerary for the team. Using a map of North America and an atlas, the students could then plot the probable travel route for the team over a two-week period. PO4. Use a written schedule of classroom activities to help them predict what visitors could expect to see if they visited the classroom on a randomly chosen day at any given hour [Chronology]. PO5. Compile a schedule of planned events during after-school hours for the course of a week (TV shows—when they are on; family trips and events). 	<p>By the end of the fifth grade, students should be able to</p> <ol style="list-style-type: none"> 1. Study historical events and persons within a given time-frame in order to create a chronology and identify related cause-and-effect factors. (SS-4.1) <ul style="list-style-type: none"> PO1. Select a significant historical figure from Delaware history and research the period of his or her life to discover what events that person might have witnessed or participated in. Then the students would compile a list of that individual's contemporaries throughout the rest of the United States and in selected other regions of the world. PO2. Examine descriptions, maps, drawings, or photos of several Delaware communities representing different chronological periods in order to analyze ways in which those communities have changed. Groups might be assigned to concentrate on specific areas such as transportation, technology, family living, or working. 	<p>By the end of the eighth grade, students should be able to:</p> <ol style="list-style-type: none"> 1. Examine historical materials relating to a particular region, society, or theme; analyze change over time, and make logical inferences concerning cause and effect. (SS-4.1) <ul style="list-style-type: none"> PO1. Create alternate time line of significant event in world history. PO2. Trace the movements of pastoral peoples (e.g., the Hebrews, Turks, Huns, or Mongols) by examining references to them in chronologies of other peoples, and use these references to build a time-line specifically for the group chosen.

Standard 4: History

All students will gather, examine, and analyze historical data. (DEI- SS2)

Strand: Analysis		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade, students will be able to:</p> <ol style="list-style-type: none"> 1. Use artifacts and documents to gather information about the past. (SS- 4.1) PO1. Given a collection of toys, games, and children’s literature from another time, students might be asked to draw conclusions about the lives and activities of children then [Analysis; content]. PO2. Parent Partnership Project: Students might collect the items for the activity listed above from parents or grandparents, including explanations of rules or usage. PO3. Viewing a collection of old photographs, maps, or aerial photographs from the local area or school building, students could be asked to identify changes in clothing, building styles, land use, and technology which have occurred since the photos were taken [Analysis]. PO4. Construct a time capsule in which they place artifacts and documents, which they feel, would serve as an accurate guide to life in the late twentieth century for future students. PO5. Given one type of technology (methods of measuring time; transportation modes; lighting, etc.), students might be asked to first place them in chronological order, and then to discuss ways in which each particular item has affected everyday life in a given period 	<p>By the end of the fifth grade, students should be able to:</p> <ol style="list-style-type: none"> 1. Identify artifacts and documents as either primary or secondary sources of historical data from which historical accounts are constructed. (SS-4.1) PO1. Construct a museum display, which includes primary and secondary sources for the theme material. Topics could include such items as favorite sports, changes in clothing styles, or the life of a well-known individual. 2. Investigate a specific historical legend (George Washington and the cherry tree; the travels of Johnny Appleseed; the adventures of Davy Crockett, etc.), and determine the factual basis (if any) for the specific deeds of the people in question. (SS-4.2) 	<p>By the end of the eighth grade, students should be able to:</p> <ol style="list-style-type: none"> 1. Master the basic research skills necessary to conduct an independent investigation of historical phenomena. (SS- 4.1) PO1. Compare an autobiographical narrative with several historical assessments of the subject in order to analyze the credibility of the autobiography. PO2. Create a map, which shows the patterns and extent of those migrations on a decade basis. 2. Examine historical documents, artifacts, and other materials, and analyze them in terms of credibility, as well as purpose, perspective, or point of view for which they were constructed. (SS-4.2) PO1. Read a series of letters or documents written by a significant historical personage and suggest possible motivations for writing the documents or the objectives toward which the documents were aimed. PO2. Express opinions and beliefs about fundamental questions of policy, government, or citizenship. PO3. Examine representative samples of poetry, folk-tales, drama, or literature from several different world civilizations. PO4. Explore the commonalities of different cultures. PO5. Examine the philosophy, literature,

religion, and artwork of an ancient
civilization and look for persistent themes
and influences on the modern world.

Standard 4. History

All students will interpret historical data. (DEI-SS3)

Strand: Interpretation		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade, students will be able to:</p> <p>1. Understand that historical accounts are constructed by drawing logical inferences from artifacts and documents. (SS- 4.1) PO1. After studying the life of a famous person from the past, students could be asked to pack a pouch with objects which would suggest important attributes or accomplishments of that person, and make an oral presentation supporting their choices. PO2. Students might be give a bag of "evidence" gathered in a mock-trial of Goldilocks or Jack (or the Beanstalk) for trespassing and destruction of property. They would then have to interpret whether or not a case could be made for the character's guilt or innocence based on that evidence. PO3. After reading or listening to stories about families in other times and cultures, students might first create a list of the major differences between their own families and those in the story, and then create their own stories about what life might have been like had they been born in a foreign country or another time.</p>	<p>By the end of the fifth grade, students should be able to:</p> <p>1. Explain why historical accounts of the same event sometimes differ and will relate this explanation to the evidence presented or the point-of-view of the author. (SS-4.1) PO1. Using drawings, paintings, oral histories, and literary sources, which illustrate the experiences of African-Americans in the 18th and 19th centuries, students might write an essay about their struggle to retain cultural cohesion within the confines of slavery. PO2. Select single historical event or person and interview their parents, grandparents, and other family members to determine their opinions on the subject. Then in class the students could examine the different responses and suggest how different personal perspectives might have led to different interpretations. PO3. After reading several accounts of the Battle of Trenton (a diary entry from a participant, a newspaper account, a textbook description, or others), students could be asked to look for similarities and differences. Then the students could be asked to give an explanation for differences noted, based on point of view or access to information.</p>	<p>By the end of the eighth grade, students should be able to:</p> <p>1. Compare different historians' descriptions of the same societies in order to examine how the choice of questions and use of sources may affect their conclusions. (SS- 4.1) PO1. Students might read explanations for the decline and fall of the Roman Empire (or Han China) and create a chart, which shows the different factors emphasized by each historian. PO2. After watching the movie "Gettysburg," students might then be assigned to groups to select different accounts of the battle, written by participants and historians. Each group would then compare these accounts to the narrative presented in the movie, and offer a conclusion about the interpretive viewpoint of the movie. PO3. Compare newspaper coverage in different regions of the same events.</p>

Curriculum Alignment
Social Studies

Standard 4: History

All students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history. (DEI- SS4)

Strand: Content		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade, students will be able to:</p> <ol style="list-style-type: none"> 1. Develop an understanding of the similarities between families now and in the past. (SS- 4.1) 	<p>By the end of the fifth grade, students should be able to:</p> <ol style="list-style-type: none"> 1. Develop an understanding of Delaware history and its connections with United States history, including: <ul style="list-style-type: none"> -- Native American inhabitants before European contact -- Exploration and settlement (1609-1775) -- From the First State to the Civil War (1776-1865) -- Growth of commerce, industry, transportation, and agriculture (1865-1945) -- Modern Delaware (1945-present) (SS-4.1) 2. Develop an understanding of selected themes in United States history, including: <ul style="list-style-type: none"> -- Who are the American people? (demographics, immigration) -- How did the United States develop its form of government? -- How have advances in technology changed our lives? -- Important people in American history (SS-4.2) <p>PO1. Visit the "touch-it" room at the Winterthur Museum to examine artifacts from the colonial period. Guess what many of them were, and how they were used. Discover the real purpose of the items (either through pictures, demonstrations, or guided experimentation); create a report, a talk, or a poster showing how life would have been different for them if had they not utilized these</p> 	<p>By the end of the eighth grade, students should be able to:</p> <ol style="list-style-type: none"> 1. Develop an understanding of pre-industrial United States history and its connections to Delaware history, including. <ul style="list-style-type: none"> -- Three worlds meet (Beginnings to 1620) -- Colonization and Settlement (1585-1763) -- Revolution and the New Nation (1754-1820s) -- Expansion and Reform (1801-1861) -- Civil War and Reconstruction (1850-1877)(SS- 4.1) <p>PO1. Compile a table comparing different forms of social and political institutions (individuals, families communities, governments, etc.) in the primary ancient civilizations.</p> 2. Develop an understanding of ancient and medieval world history, and the continuing influence of major civilizations, including: <ul style="list-style-type: none"> -- The beginnings of human society -- Early civilizations and pastoral peoples (4,000-1,000 BC) -- Classical traditions, major religions, and great empires (1,000BC-300AD) -- Expanding zones of exchange and encounter (300-1,000AD) -- Intensified hemispheric interactions (1,000-1,500AD) (SS-4.2) <p>PO1. Compare the relationship of government and religion in two or more</p>

implements.

PO2. Construct a Delaware "Fact Book" which includes important individuals and significant events from Delaware history. Share with their classmates their reasons for including each item.

major civilizations.

Investigate the rise of Christianity in the Roman Empire following the breakdown of the Pax Roman.

Standard 1: Nature and Application of Science and Technology

All students will ask questions that help learn about the world; design and conduct investigations using appropriate methodology and technology; learn from books and other sources of information; communicate their findings using appropriate technology; and reconstruct previously learned knowledge. (DEL-SCI)

Strand: Science as Inquiry		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade students are expected to:</p> <ol style="list-style-type: none"> 1. Generate questions about the natural world and how things work. (SCI – 1.1) PO1. Formulate questions about objects, organisms, events, and relationships in the natural world. 2. Categorize objects, organisms and events by different characteristics. (SCI – 1.2) PO2. Organize (e.g. sort, classify, sequence objects, organisms and events by different characteristics. 3. Perform simple measurements and comparisons. (SCI – 3.1) PO1. Use simple tools such as thermometers, balances, clocks, magnifiers, and computers to observe, measure and compare information about the natural world. 4. Use graphs and charts to better visualize the results of observations and measurements; describe what counts as suitable evidence in answering questions. (SCI – 4.1) 	<p>By the end of the fifth grade students are expected to:</p> <ol style="list-style-type: none"> 1. Use scientific inquiry methods during field and laboratory investigations. (SCI – 1.1) PO1. Plan and implement descriptive and simple experimental investigations including asking well-defined questions, formulating testable hypothesis and selecting and using equipment and technology. 2. Use a variety of tools and methods to observe and gather information. Tools including calculators, safety goggles, microscopes, cameras, sound records, computer books, rulers, thermometer, and timing. (SCI – 1.2) 3. Communicate valid conclusions, construct simple graphs, tables, maps, and charts using tools including computers to organize, examine and evaluate information; and share information with class. (SCI – 1.3) 	<p>By the end of the eighth grade students are expected to:</p> <ol style="list-style-type: none"> 1. Ask reasonable, relevant, and testable scientific questions about topics of interest and determine the type and complexity of the investigation required to answer them. (SCI – 1.1) PO1. Conduct a series of investigations with sufficient complexity to require the use of various experimental techniques and strategies; the separation and control variables; the consolidation, organization and display of data; the investigation to allow peer review of the results. PO2. Develop the competence to use a variety of tools and techniques in order to solve a wide range of practical problems. PO3. Use calculators to compare amounts proportionally (e.g., proportion of fat, protein, and carbohydrates in foods). PO4. Use computers to store and retrieve information in topical, alphabetical, numerical, and key word files and to create and manipulate individual files.

PO1. Construct simple graphs and charts to organize, examine and evaluate information; compare data and determine what charts or graphs provide reasonable evidence.

PO5. Read analog and digital meters in instruments used to make direct measurements of length, volume, weight, elapsed time, and temperature and choose appropriate units for reporting magnitudes.

PO6. Use cameras and tape recorders for capturing information.

PO7. Deciding what evidence from an investigation is useful.

PO8. Organizing and summarizing information and data in tables and graphs in order to identify relationships.

Standard 1. Nature and Application of Science and Technology

All students will ask questions that will help learn about the world; design and conduct investigations using appropriate methodology and technology; learn from books and other sources of information; communicate their findings using appropriate technology; and technology; and reconstruct previously learned knowledge. (DEL-SCI 1)

Strand: Science, Technology, and Society		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>1. Distinguish between natural and man made objects. (SCI –1.1)</p> <p>PO1. Identify natural objects</p> <p>PO2. Identify man-made objects</p> <p>PO3. Describe differences between natural and man-made objects.</p> <p>2. Use simple technology (e.g., scales, balances, magnifies, computers)</p> <p>PO1. Demonstrate the proper use of simple technology. (SCI – 1.3)</p> <p>3. Identify occupations that require the application Of science and technology. (SCI - 1.3)</p> <p>PO1. Describe occupations that require the application of technology.</p>	<p>1. Explain how science relates to other disciplines such as biology, chemistry, geology and physics. (SCI – 1.1)</p> <p>2. Identify and describe how technology contributes to solving problems. (SCI – 1.2)</p> <p>PO1. Identify various technologies (e.g., zipper, paper clips, computers)</p> <p>PO2. Describe how various technologies contribute to solving problems.</p> <p>3. Explain how technology improves our quality of life. (SCI – 1.3)</p>	<p>By the end of the eighth grade students are expected to:</p> <p>1. Explain how social, cultural, environmental, Influence the use of technology throughout the world. (SCI – 1.1)</p> <p>PO1. Investigate the relationship of factors such as resource availability and cultural tradition on the kinds of science and technologies pursued. Examples could include:</p> <p>a – An analysis of transportation methods and expertise around the world.</p> <p>b - The emergence of the United States as a world power in the polymer industry.</p> <p>a - The global war on cancer and other serious diseases.</p> <p>2. Explain how issues surrounding science, technology, and society are complex and involve many risk/benefit considerations.</p> <p>PO1. Explore and discuss various problems which have faced society and the technologies developed to deal with such problems.</p> <p>PO2. Identify the products and processes</p>

developed to solve these problems and consider the benefits delivered and the risks created by these new technologies.

Entrepreneurial Content Standards And Benchmarks

I - Introduce R - Reinforce M - Mastery

Content Standard	Benchmarks																
	situation.																
	115. Recognize the need to create goals and objectives.											I	R	R	R	R	M
	116. Understand the significance of controls in the planning process.											I	R	R	R	R	M
	117. Describe the features of hybrid forms of ownership; limited partnership, S corporation, limited liability company and joint ventures.												I	R	R	R	M
	118. Analyze types of franchising.												I	R	R	R	M
	119. Research the benefits and limitations of franchising for both the franchiser and the franchisee.												I	R	R	R	M
	120. Review the law pertaining to franchises and the provisions of a franchise contract.													I	R	R	M
17. All students will analyze the concepts of cash flow management, pricing and creative advertising/promotions; understand the international opportunities for small business.	121. Review and summarize the advantages and disadvantages of purchasing an exiting business.												I	R	R	R	M
	122. Understand the five critical areas to investigate when purchasing a business.													I	R	R	M
	123. Examine the methods for computing the value of a business.													I	R	R	M
	124. Describe five cash management roles of entrepreneurs.													I	R	R	M
	125. Differentiate between cash and profit.													I	R	R	M
	126. Develop a cash budget.													I	R	R	M
	127. Discuss the fundamental principles involved in managing receivables, payables and inventory.													I	R	R	M
	128. List tools utilized to obtain the maximum benefit from available cash.													I	R	R	M
	129. Interpret the effects of pricing.													I	R	R	M
	130. Explain the objectives and strategies applied when pricing new product.													I	R	R	M
	131. Recognize the effects of pricing on image.													I	R	R	M
	132. Evaluate the pricing techniques employed by retailers, manufacturers, service firms and wholesalers.													I	R	R	M
	133. Relate the impact of credit on pricing.													I	R	R	M
	134. Define advertising and distinguish it from publicity and													I	R	R	M

Entrepreneurial Content Standards And Benchmarks

I - Introduce R - Reinforce M - Mastery

Content Standard	Benchmarks													
13. All students will demonstrate an understanding of applied concepts in entrepreneurship.														
	103. Create systems to gather input from every team member for simulation decisions.							I	R	R	R	R	R	M
14. All students will strengthen communication skills by creating a visually effective presentation.	104. Reach and implement decisions in a timely manner.							I	R	R	R	R	R	M
	105. List key issues in various case studies.							I	R	R	R	R	R	M
15. All students will demonstrate an understanding of the concepts of entrepreneurship including challenges of small business ownership and ethic/social responsibility.	106. Participate in hands-on simulation reinforcing those concepts.							I	R	R	R	R	R	M
	107. Use charts, graphs, matrices, and color to enhance presentation.							I	R	R	R	R	R	M
	108. Use graphics to represent business concepts and ideas.									I	R	R	R	M
	109. Analyze ways to avoid and overcome the major pitfalls involved in small business management.									I	R	R	I	M
16. All students will demonstrate an understanding of the basic techniques of strategic management and the form of business ownership, in addition to the opportunities of franchising or purchasing an existing business.	110. Identify the circumstances that contribute to the small business failure record.								I	R	R	R	R	M
	111. List three levels of ethical standards.								I	R	R	R	R	M
	112. Understand the concept of social responsibility and business's responsibility to the environment, employees, customers, investors and the community.									I	R	R	R	M
	113. Interpret the importance of strategic planning.								I	R	R	R	R	M
	114. Demonstrate how to assess a firm's competitive									I	R	R	R	M

Entrepreneurial Content Standards And Benchmarks

I - Introduce R - Reinforce M - Mastery

Content Standard	Benchmarks													
	ethically.													
	82. Recognize business behavior.							I	R	R	R	R	R	M
	83. List ten ways to improve quality for a business.									I	R	R	R	M
	84. Explain why quality leads to profit.									I	R	R	R	M
	85. List the four A's of an effect contract. Explain how a contract can be used to strengthen a business plan.									I	R	R	R	M
	86. List the pros and cons of franchising.									I	R	R	R	M
9. All students will demonstrate in understanding of the way liability, taxation, technology and the economy affects businesses.	87. Describe the content of a basic franchise agreement.										I	R	R	M
	88. Contrast licensing with franchising.										I	R	R	M
	89. Explain the concept of synergism.									I	R	R	R	M
	90. Explain how insurance can protect a business.									I	R	R	R	M
	91. Determine when and what kind of insurance a business needs.										I	R	R	M
10. All students will demonstrate in understanding of the market potential of a business of the student's choosing.	92. Define gross national product and gross domestic product.										I	R	R	M
	93. Explain the relationship between taxes and incentive.										I	R	R	M
	94. Demonstrate knowledge of new computer technologies and methods to access these technologies.					I	R	R	R	R	R	R	R	M
	95. Define a business or a business opportunity to pursue.					I	R	R	R	R	R	R	R	M
	96. Identify ad access sources of information on the business							I	R	R	R	R	R	M
	97. Describe the opportunity, threats, and key success factors in the industry in which the business will operate.										I	R	R	M
1. All students will demonstrate problem solving skills and decision-making ability.	98. Recognize competitors and compare on the basis of key success factor.										I	R	R	M
2. All students will operate efficiently in a team environment.	99. Identify and describe customer segments.										I	R	R	M
	100. Relate the information gathered to a strategic plan for the business.									I	R	R	R	M
	101. Successfully participate in a Dino Park simulation.										I	R	R	M
	102. Develop roles and responsibilities for team members.									I	R	R	R	M

Entrepreneurial Content Standards And Benchmarks

I - Introduce R - Reinforce M - Mastery

Content Standard	Benchmarks																
All students will demonstrate understanding of financial concepts essential to operate a small business.	60. Relate cost/benefit analysis to personal and business decisions.											I	R	R	R	M	
	61. Demonstrate the opportunity cost of an investment.												I	R	R	M	
	62. Complete a personal budget.											I	R	R	R	M	
	63. Summarize the difference between the present and future of a dollar.									I	R	R	R	R	R	M	
	64. Contrast bonds and stocks.											I	R	R	R	M	
	65. Explain the effects of inflation have on the value of a dollar.											I	R	R	R	M	
	66. Demonstrate an understanding of a bond table.												I	R	R	M	
	67. Calculate debt-to equity ratio and debt ratio.													I	R	R	M
	68. Evaluate a balance sheet using ratio.														I	R	R
All students will apply basic quantitative skills to practical business situations.	69. List new sources of capital and explain equity financing.											I	R	R	R	R	M
	70. Analyze accounts payable.													I	R	R	M
	71. Explain the purpose of venture capitalists and determine a company's total value.													I	R	R	M
	72. Identify the components of a business plan.									I	R	R	R	R	R	R	M
	73. Perform simple calculations quickly to facilitate negotiations.												I	R	R	R	M
	74. Demonstrate how a business obtains raw materials for resale.													I	R	R	M
	75. Demonstrate an understanding of the basic economics and sale dynamics involved in flea market/kiosk-type selling.													I	R	R	M
	76. Develop a simple income statement.													I	R	R	M
	77. Track inventory and cash revenue													I	R	R	M
All students will understand the legal and ethical relationships between a business and its customers and franchisees/licenseses.	78. Explain the importance of establishing a personal credit history.														I	R	M
	79. Describe how to use charge accounts and layaways.														I	R	M
	80. List the four C's of business credit.															I	M
	81. Explain the value of treating customers and employees															I	M

Entrepreneurial Content Standards And Benchmarks

I - Introduce R - Reinforce M - Mastery

Content Standard	Benchmarks																	
	39. Determine which form of business is most suitable for selected business ideas.								I	R	R	R	R					
	40. Develop plans for test marketing a new invention.										I	R	R	R	R			M
	41. Compare and contrast copy, trademark and patent.										I	R	R	M				
4. All students will analyze and apply the basic principals of business communication and marketing,	42. List and explain the four steps by which an invention becomes a real product.										I	R	R	M				
	43. Calculate mark-up percentage, price, profit, margin and cost.										I	R	R	M				
	44. Identify factors involved in choosing a business name.										I	R	R	R	R	R		M
	45. Compose and type a business memo and letter; recollect the significance of proofreading and editing for spelling, punctuation, accuracy of content and clarity of expression.							I	R	R	R	R	R	R	R	R		M
	46. Develop product features and customer benefits.							I	R	R	R	R	R	R	R	R		M
	47. Apply the seven principles of selling.										I	R	R	R	R	R		M
	48. Explain the seven steps of a sales call.										I	R	R	R	R	R		M
5. All students will demonstrate an understanding of basic accounting concepts necessary to operate/manage a business.	49. Identify and apply the four elements of a marketing plan.										I	R	R	R	R	R		M
	50. Recognize the five parts of a printed advertisement and develop an advertising concept.										I	R	R	R	R	R		M
	51. Apply market research to understand customer needs.									I	R	R	R	R	R	R		M
	52. Explain start-up costs, cost of goods sold and operating costs.									I	R	R	R	R	R	R		M
	53. Differentiate between fixed costs and variable costs.										I	R	R	R	R	R		M
	54. Calculate profit and profit per unit.							I	R	R	R	R	R	R	R	R		M
	55. Prepare a monthly income statement and compute net profit or loss.							I	R	R	R	R	R	R	R	R		M
	56. Analyze income statement line items as a percentage of revenue.									I	R	R	R	R	R	R		M
	57. Perform a break-even analysis.										I	R	R	R	R	R		M
	58. Find the return on investments and compare risk and returns.										I	R	R	R	R	R		M
	59. Interpret stock tables.										I	R	R	R	R	R		M

Entrepreneurial Content Standards And Benchmarks

I - Introduce R - Reinforce M - Mastery

Content Standard	Benchmarks																			
All students will demonstrate an awareness of and a basic foundation for starting a small business.	17. Think of a creative idea; complete an interest inventory to assess ability to produce idea.	I	R	R	R	R	R	R	R	R	R	M								
	18. Create a written or picture business plan.	I	R	R	M															
	19. Complete a written or picture interest - inventory.	I	R	R	R	R	R	R	R	R	R	M								
	20. Recognize skills needed to practice record keeping such as inventory of materials and supplies, expenses, letters and banking transactions.	I	R	R	R	R	R	R	R	R	M									
	21. Orally present individual or group plan to class.	I	R	R	R	R	R	R	R	R	R	R	M							
All students will demonstrate an understanding of problem solving skills and decision-making ability.	22. Define entrepreneurship, and economics.	I	R	R	R	M														
	23. Practice creative, vertical thinking.				I	R	R	R	M											
	24. Analyze methods by which business solve problems and meet consumers' needs.		I	R	R	R	R	R	R	M										
	25. Understand basic principles of free enterprise economy.		I	R	R	R	R	R	R	R	R	M								
	26. Explain the relationship between supply and demand.						I	R	R	R	M									
	27. Explain the difference between product and services.				I	R	R	R	R	R	M									
	28. Analyze personal characteristics and relate them to common traits of successful entrepreneurs.											R	M							
	29. Practice negotiation.						I	R	R	R	R	M								
	30. Construct business ledgers.						I	R	R	R	R	R	M							
	31. Utilize reference materials useful in starting a business.					I	R	R	R	R	R	R	M							
	32. Develop inventions and learn the procedures for protecting them.						I	R	R	R	R	R								
	33. List, define and contrast the four types of businesses.						I	R	R	R	R	R								
	34. Introduce the production/distribution chain and analyze its effect on price.							I	R	R	R	M								
35. Introduce possible business ventures for young entrepreneurs.		I	R	R	R	R	R	R	R	R	R									
36. Compare and contrast sole proprietorship and partnerships.							I	R	R	R	M									
37. Understand corporate structure and management.							I	R	R	R	M									
38. Simulate the steps necessary for registering a sole proprietorship.										I	R	R								

Entrepreneurial Content Standards And Benchmarks

I - Introduce R - Reinforce M - Mastery

Content Standard

Benchmarks

Content Standard	Benchmark	K	1	2	3	4	5	6	7	8	9	10	11	12
1. All students will demonstrate an awareness of entrepreneurship and why it is the foundation of America's economy.	1. Recognize a variety of jobs people perform.	I	R	R	M									
	2. Describe work performed by family and community members; describe how they work.	I	R	R	R	M								
	3. Define entrepreneur; explain the difference between entrepreneur and employee.	I	R	R	R	M								
	4. Identify characteristics of a successful entrepreneur.	I	R	R	M									
	5. Listen to, read, discuss and role-play stories about young entrepreneurs.	I	R	R	R	R	M							
	6. Demonstrate an understanding of free enterprise.		I	R	R	R	R	M						
	7. Recognize and describe the three basic human needs.	I	R	R	R	R	M							
	8. Explain and demonstrate the difference between needs and wants.	I	R	R	R	R	M							
	9. Explain how needs and wants influence the American economy.			I	R	R	R	M						
	10. Describe the difference between consumers and producers.	I	R	R	R	R	R	M						
	11. Demonstrate and explain how people have unlimited wants but limited resources to satisfy them.		I	R	R	R	R	M						
	12. Recognize that people must make choices among alternatives.	I	R	R	R	R	M							
	13. Recognize the need for more goods and services impact supply and demand.			I	R	R	R	R	M					
	14. Recognize how goods are transported both within and outside the country.	I	R	R	R	M								
	15. Recognize how money is used as an exchange for goods and services.	I	R	R	R	R	R	R	M					
	16. Explain the difference between product and service.	I	R	R	R	R	M							

ENTREPRENEURIAL



All students will understand that organisms are linked to one another in an ecosystem by the flow of energy and the cycling of materials. Humans are an integral part of the natural system and human activities can alter the stability of ecosystems. Students will acquire a basic understanding of the structure of ecosystems and how they function and how they change. They will also study how humans can apply scientific and technological knowledge about ecosystems in making informed decisions about the use of natural resources. (DEL – 8)

Strand: Technology and its Influence on the Environment		
Early Elementary K-3	Late Elementary 4-5	Middle 6 – 8
<p>1. Explain how technology allows many different kinds of materials to be reduced, recycled, and reused. (SCI – 8.1)</p> <p>PO1. Identify a variety of ways to change personal habits to reduce, reuse, and recycle resources.</p> <p>2. Explain how technology enables farmers to increase crop production. Technology also allows food to be stored for long periods and transported long distances without spoiling.</p> <p>PO1. Use Delaware maps to locate the primary growing areas of the state. Explain the various technologies used on the farm to improve crop yields as well as the various technologies required in transporting and distributing the crops from the farm to the store.</p>	<p>Demonstrate how various technologies are used to access resources or create conveniences needed by society, such as logging, building of highways, shopping centers, and dams.</p> <p>PO1. Use current or past issue that has been discussed in the media such as the building of Delaware Route 1, spraying for mosquito larvae, damming or various rivers, and the building expansion in Sussex County. Debate the pros and cons of the issue.</p>	<p>1. Explain how agriculture relies heavily on technology to increase productivity. Advances in irrigation allow crops to grow in areas where there is not enough precipitation. Chemicals are used to fertilize crops and to control damage done by rodents, fungi, insects, and weeds. The need to increase agricultural production results in environmental trade-off (e.g., saltwater intrusion, water table lowering, agricultural runoff into rivers/streams, elimination of beneficial insects, desertification). (SCI – 8.1)</p> <p>PO1. Investigate the economic and environmental trade-off involved in implementing agricultural technology as well as farmers' efforts (e.g., hedge rowing, ditching) to minimize the environmental impact of these technologies.</p>

Standard 8: Ecology

All students will understand that organisms are linked to one another in an ecosystem by the flow of energy and the cycling of materials. Humans are an integral part of the natural system and human activities can alter the stability of ecosystems. Students will acquire a basic understanding of the structure of ecosystems and how they function and how they change. They will also study how humans can apply scientific and technological knowledge about ecosystems in making informed decisions about the use of natural resources. (DEL – 8)

Strand: Changes in Environment		
Early Elementary K-3	Late Elementary 4-5	Middle 6 – 8
<p>1. Understand that living things change the area in which they live. (SCI – 8.1)</p> <p>PO1. Participate in a field trip to a natural area such as a State Park. Prior to the trip prepare a series of questions for the Park Ranger or field biologist concerning how living things influence and are influenced by their surroundings. Keep a record of the examples cited and discuss if the changes are beneficial or harmful.</p>	<p>1. Explain how organisms adapt to live and reproduce in certain environments. (SCI – 8.1) PO1. Observe a variety of local plants and animals in several different habitats. Identify structures, features, and behaviors of the organisms that make them suitable for survival in these habitats.</p> <p>2. Describe changes in an organism's environments that can either be beneficial or harmful. Organisms may be affected by others resulting from physical factors (e.g., rainfall, temperature), by physical forces (e.g., storms, earthquakes), and by daily, seasonal, and annual cycles. (SCI – 8.1) PO2. Investigate how a particular environment (e.g., field, and playground) changes over time. Classify the changes as either resulting from physical forces or from the action of living organisms, and determine whether the changes are beneficial or harmful to the organisms.</p> <p>3. Observe your environment. Explain how pollution and human activities can change the environment and adversely affect the health and survival of humans and other species. (SCI – 8.1) PO3. Design a simple brochure, poster, booklet, or video to increase public awareness about the impact of altered habitats or land development on various Delaware species (e.g., Piping Plover, Bluebird, Delmarva Fox Squirrel, Bald Eagle).</p>	<p>1. Explain changes in the physical or biological conditions of an ecosystem that can alter the diversity of species in the system. (SCI – 8.1)</p> <p>PO1. Investigate local areas (disturbed and undisturbed) that are undergoing natural cycles of succession such as abandoned gardens, uncut areas beneath power lines, areas along ditch banks and fences, and the edge of a forest.</p> <p>PO2. Predict how plant communities that grow in the area may change over time and how their presence determine what kinds of animals may move into or out of the area.</p> <p>2. The size of populations in an ecosystem may increase or decrease as a result of the interrelationships among organisms, availability of resources, natural disasters, habitat changes, and pollution.</p> <p>PO1. Construct a graph showing the carrying capacity of a single species in a closed system (brine shrimp, fruit fly). Record the change in population over a period of time. Explain how the carrying capacity affects the population growth of the system.</p>

All students will understand that organisms are linked to one another in an ecosystem by the flow of energy and the cycling of materials. Humans are an integral part of the natural system and human activities can alter the stability of ecosystems. Students will acquire a basic understanding of the structure of ecosystems and how they function and how they change. They will also study how humans can apply scientific and technological knowledge about ecosystems in making informed decisions about the use of natural resources. (DEL – 8)

Strand: Interactions Within The World Around Us		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of third grade students will be able to:</p> <ol style="list-style-type: none"> 1. Explain the interaction of living and non-living components within ecosystems. (SCI – 8.1) <ul style="list-style-type: none"> PO1. Identify living components within ecosystem PO2. Identify non-living components within ecosystems PO3. Describe the interaction among living and non-living components in an ecosystem 2. Living things depend on each other in many ways. Animals use plants for shelter, and eat plants and other animals for food. Plants depend on animals to carry their pollen and to disperse their seeds. (SCI – 8.1) <ul style="list-style-type: none"> PO1. Explore a simple natural system such as a classroom aquarium or an outdoor habitat. (See also Life Processes B. Requirements for Survival.) Identify common basic needs of plants and animals and investigate ways in which they depend on each other for these needs. 	<p>By the end of fifth grade students will be able to:</p> <ol style="list-style-type: none"> 1. Demonstrate how living organisms interact with the living and non-living parts of their surroundings to meet their for survival. (SCI – 8.1) <ul style="list-style-type: none"> PO1. Illustrate a food chain or a web of food chains by sequentially ordering pictures or samples of a variety of living things (e.g., fungi, insects, plants, and animals). 	

Strand: Health and Technology Applications		
Early Elementary K-3	Late Elementary 4-5	Middle 6 - 8
		<p>1. Understand that selective breeding is used to produce new varieties of cultivated plants and domesticated animals with enhanced traits. (SCI – 7.1)</p> <p>PO1. Use a variety of resources to develop a report on selective breeding. Select a cultivated plant (e.g., “Super Sweet Corn”, “Sugar Baby Watermelon”) or domesticated animals (e.g., “Ovenstuffer Roaster”, n Low Fat Hogs) and trace its history of development and the traits of the plant or animal that were enhanced by selective breeding.</p> <p>2. Understand that knowledge gained from research in genetics is being applied to areas of human health.</p> <p>PO1. Select one area of genetic, reproductive, or embryonic research. Explain the human benefits as well as the economic, social, and ethical issues raised by such research.</p>

Strand: Reproduction and Development		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
		<p>1. Explain asexual reproduction: A new organism grows from a single cell or a cluster of cells provided by the parent and results in offspring genetically identical to the parent. (SCI – 7.1) PO1. Observe asexual reproduction in a variety of organisms (e.g., yeast, hydra, and plants) and discuss important characteristics of this form of reproduction in preparation for an in-depth comparison with sexual reproduction.</p> <p>2. Explain how sexual reproduction, gametes (egg and sperm), which are produced in specialized structures of the parents, fuse during fertilization to form an organism. Since each gamete contributes a set of chromosomes, the offspring have traits of both parents. (SCI – 7.2) PO1. Describe sexual reproductive patterns in flowering plants and a variety of animals. Discuss the difference between sexual and asexual reproduction.</p> <p>3. Explain what happens to an egg after it is fertilized. It undergoes an orderly series of changes involving cell division and differentiation as a new organism is formed. Each of the new cells in the developing organism receives an exact copy of the genetic information contained in the fertilized egg. (SCI – 7.2) PO1. Observe, describe, and measure changes that occur in an organism (e.g., bean plant, butterfly, frog, chicken) as it develops from a seed or fertilized egg into an adult.</p>

Standard 7 Diversity and Continuity of Living Things

Strand Evolution		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>1. Recognize that plants and animals have features that help them survive and reproduce in different places. (SCI – 7.1)</p> <p>PO1. Investigate and describe specific features of plants and animals that help them survive in different places (e.g., fish gills for breathing in water, feathers for flying and warmth, protective coloration for hiding).</p> <p>2. Explain how fossils provide evidence that present-day plants and animals are both similar to and different from those that lived in the past. These fossil records indicate that some plants and animals that once lived on Earth no longer exist. (SCI – 7.2)</p> <p>PO1. Examine a variety of Delaware fossils or fossil replicas. Compare them to present day plants and animals and draw reasonable conclusions about the similarities and differences between the fossils and present day plants and animals.</p>	<p>1. Explain that organisms of the same species have variations, which may provide an advantage in reproduction and survival. (SCI – 7.1)</p> <p>PO1. Observe and describe variations in a species (e.g., length of bean seeds, height in radishes, leg length in grasshoppers). Predict how these variations may affect the ability of the organism to survive.</p>	<p>1. Recognize that natural selection is the process by which some individuals with certain traits are more likely to survive and produce greater numbers of offspring's than other organisms of the same species. Conditions in the environment can affect which individuals survive in order to reproduce and pass their traits on to the future generations. Small differences between parents and offspring accumulate over many generations and ultimately new species may arise. (SCI – 7.1)</p> <p>PO1. Conduct a natural selection simulation to demonstrate that a specific trait has selective advantages for an organism. For example, study the advantages of protective coloration of a species that is preyed upon. Scatter different colored toothpicks in the grass, role-play a predator, and quickly pick up as many toothpicks as possible. Collect data on the remaining colors and discuss the advantages of protective coloration in the survival of organisms</p> <p>PO2. Investigate and discuss how short term physiological adaptations of an organism (e.g., skin tanning, muscle development, and formation of calluses) differ from long term evolutionary adaptations that occur in a group of organisms over generations</p>

Standard 7 Diversity and Continuity of Living Things

Strand: Biotechnology and It's Application		
Early Elementary K-3	Late Elementary 4-5	Middle 6 – 8
<p>By the end of third grade, students will be able to:</p> <ol style="list-style-type: none"> Humans have always applied knowledge of the varied characteristics of plants and animals to satisfy their needs. <p>PO1. Identify the plants or animals associated with particular items of food, shelter, or clothing and discuss how similar plants or animals can be used in different ways (e.g., cattle for meat, milk, leather; trees for fruit and wood; dogs for hunting, protection, and transportation).</p>	<p>By the end of fifth grade, student will be able to:</p> <ol style="list-style-type: none"> The climate and soils in Delaware are ideal for growing a great variety of fruits and vegetables. Delaware scientists continue to explore ways to improve the growing conditions and quality of these crops. (SCI – 7.1) <p>Invite a person from the community such as a farmer, an agricultural extension agent, or an agricultural scientist to talk about how specific varieties of fruits and vegetables grown in Delaware changed over the past decade. Discuss future plans for improving the quality and yields of these crops.</p>	

Strand Diversity		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>1. Classify and sort plants and animals based on appearance and behavior. (SCI – 7.1)</p> <p>PO1. Construct or classification systems that allow the sorting of plants and animals into groups based on external features or patterns of behavior (e.g., animals that build nests, plants that have broad leaves/plants with needle-like leaves).</p>	<p>1. Distinguish between organisms based on their distinct and unique features. Explain how specialized features are used for survival. (SCI – 7.1)</p> <p>PO1. Examine a variety of common plants and animals for similarities and differences in features such as animal tracks, beak shape, leaf structure. Use the similarities and differences of the features to develop appropriate classifications that sort and group these organisms. For example, birds can be categorized according to the shape of their beaks and the type of food they eat (e.g., berry eaters, seed eaters, meat eaters)</p>	<p>1. Classify organisms into five kingdoms (monera, protista, fungi, plantal, animals) based on similarities in structure and behavior. (SCI – 7.1)</p> <p>PO1. Examine a variety of common organisms representing the five kingdoms, and construct and use a dichotomous key to classify these organisms.</p> <p>2. Understand that a species is an important biological grouping of organisms, whose members have similar structures, normally interbred, and produce fertile offspring (SCI – 7.2)</p> <p>3. Explain how each structure in an organism is uniquely adapted to perform a particular function for enhancing the ability of the organism to survive. (SCI – 7.3)</p> <p>PO1. Examine selected internal and external structures of different plant and animals species. Describe and compare those structures that perform a common function, (e.g., teeth of herbivores/carnivores, leaves in deciduous structure enable the organism to survive in its particular environment)</p>

Strand 7: Diversity and Community of Living Things

All students will study how living things reproduce, develop, and transmit traits, and how theories of evolution explain the unity and diversity of species found on Earth. Students will also study how knowledge of genetics, reproduction, and development is being applied to improve agriculture and human health
CM-SC17

Strand: Heredity and Reproduction

Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of third grade students will be able to:</p> <ol style="list-style-type: none"> 1. Explain how the offspring of plants and animals resemble their parents in many ways although they are not exactly like their parents or each other. (SCI – 7.1) PO1. Observe parents and offspring from a variety of species such as dogs, cats, rabbits, and bean plants. Identify characteristics that the offspring have in common with their parents and characteristics, which are different from their parents. 2. Explain that the offspring of some plants and animals look very different from their parents when they are first born. Similarities between parents and their offspring become more apparent as the offspring develops. (SCI – 7.2) PO2. Observe and compare similarities and differences in characteristics of a wide range of mature and immature organisms such as tadpoles/frogs, caterpillars/butterflies, and seedlings/mature plants. Keep a journal describing the changes that occur in the appearance of the plants and animals as they develop. 3. Explain that the phases in the life cycle of plants and animals (i.e., birth, growth, reproduction, and death) are predictable and describable but differs from species to species. (SCI – 7.3) PO3. Discuss the human life cycle and generate some reasonable questions about differences in development during the various stages – newborn, child, adolescent, adult, elder. 	<p>By the end of fifth grade students will be able to:</p> <ol style="list-style-type: none"> 1. Explain how physical characteristics are passed on from parent to offspring and organisms with two parents inherit characteristics of both. (SCI – 7.1) PO1. Observe parents and offspring from a variety of species (e.g., hamsters, mice, fish) and draw reasonable conclusions about the inheritance of traits such as body shape, coloration, and behavior 	<p>By the end of eighth grade students will be able to:</p> <ol style="list-style-type: none"> 1. Explain that chromosomes, which are components of cells, occur in pairs and carry hereditary information and the subunits of chromosomes are genes, which direct the formation of an organism's traits. (SCI – 7.1) PO1. Use models to demonstrate that chromosomes and genes come in pairs and that chromosomes are composed of many genes. Use these same models to discuss how genetic material is transmitted from cell to cell or from parent to offspring. PO2. Use Punnett squares and pedigree charts to demonstrate and predict how single gene traits, such as seed shape in peas and tongue rolling in humans, are transmitted to offspring.

Standard 6: Life Processes

Students understand the characteristics of living things, the diversity of life and how organisms change over time in terms of biological adaptation and genetics. Students understand the interrelationships of matter and energy in living organisms and the interactions of living organisms with their environment. Students understand how knowledge about life processes can apply to improving human health and well being. (DEL – SCI6)

Strand: Health and Technology Application		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>1. Demonstrate how a well-balance diet, adequate rest, exercise, and good hygiene are essential for people to stay healthy. (SCI – 6.3)</p> <p>PO1. Collect, records, and chart information relating to personal health using simple devices such as thermometer, scale a measuring tape. Use this information to discuss individual, group or class trends and patterns.</p>	<p>1. Explain technological advances in medicine, the development of various safety devices and protective equipment, and improvements in hygiene, that have helped in the diagnosis and treatment of illness and have reduced the number of damaging and life threatening injuries. (SCI – 6.1)</p> <p>PO1. Investigate, discuss, and generate questions about the contributions of science and technology to good health. Give consideration to the following: water purification, personal hygiene, sanitation, antibiotics, tools for diagnosis, repair and replacement of body parts, and sports and auto safety.</p>	<p>1. Explain the function and health or organisms, including humans, are influenced by heredity, diet, lifestyle, bacteria, viruses, parasites, and the environment. Certain body structures and systems function to protect against disease and injury. (SCI – 6.1)</p> <p>PO1. Select a relevant health topic (e.g., diet, drugs, exercise, disease), write a research-based paper that explains how normal life processes are affected by your selection, and give an oral presentation on the results of the research.</p> <p>2. Explain how sanitation measures such as the use or sewers, landfills, quarantines, and safe food handling are important in controlling the spread of organisms that cause disease. (SCI – 6.2)</p> <p>PO2. Investigate the impact of improved sanitation measures on the health of the local population using a full range of community resources such as guest lecturers, field trips, libraries, and community agencies.</p>

Standard 6: Life Processes

Students understand the characteristics of living things, the diversity of life and how organisms change over time in terms of biological adaptation and genetics. Students understand the interrelationships of matter and energy in living organisms and the interactions of living organisms with their environment. Students understand how knowledge about life processes can apply to improving human health and well being. (DEL-SC16)

Strand: Regulation and Behavior		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade students will be able to:</p>	<p>By the end of the fifth grade students will be able to:</p> <ol style="list-style-type: none"> 1. Understand that living organisms are composed of parts that work together to ensure the survival of the whole organism. The behavior of an organism is influenced by internal clues such as hunger and external clues such as air temperature. (SCI-6.1) <p>PO1. Use human models to locate internal organs.</p> <p>PO2. Describe the effect one organ can have on another organ and how each organ contributes to the well being of a person.</p> <p>PO3. Describe how organs detect changes in the environment.</p>	<p>By the end of the eighth grade students will be able to:</p> <ol style="list-style-type: none"> 1. Understand that all organisms obtain and use resources to grow, reproduce, and maintain a relatively stable environment while living in a constantly changing external environment. Regulation of an organism's internal environment involves sensing external changes in the environment and changing physiological activities to keep within the range required to survive. (National Science Education Standards, 1994) (SCI-6.1) <p>PO1. Conduct a simple investigation to determine factors that affect pulse rate. Work with a partner and record pulse rates while sitting quietly, lying on the floor, running in place, and doing jumping jacks. Construct a graph of your pulse rate over time and describe how the graph indicates that you might be observing a system in dynamic balance. (Investigating Systems and Change, BSCS, 1994)</p>

Standard of Life Processes

Students understand the characteristics of living things, the diversity of life and how organisms change over time in terms of biological adaptation and genetics. Students understand the interrelationships of matter and energy in living organisms and the interactions of living organisms with their environment. Students understand how knowledge about life processes can apply to improving human health and well being. (DEL – SCI6)

Strand: Flow of Matter and Energy / Matter and Energy Transformation		
Early Elementary K-3	Late Elementary 4-5	
	<p>1. Demonstrate how living organisms interact with living and non-living parts of their surroundings to meet their needs for survival. These interactions lead to a constant exchange of matter and energy. (SCI – 6.1)</p> <p>PO1. Develop a list of food items offered for lunch by the school cafeteria. Work in-groups to construct a food chain that traces the source of each food items from plant origin to the product eaten.</p>	<p>1. Demonstrate how plants make their food by the process of photosynthesis. (SCI – 6.1)</p> <p>PO1. Conduct simple experiments with green plants to determine the requirements and products of photosynthesis. For example, place elodea in a clean inverted funnel and place both the elodea and funnel in a beaker of water. Place a test tube over the spout end of the funnel and measure oxygen bubble production as evidence of photosynthesis.</p> <p>2. Explain how living things obtain energy from food. Energy is needed for living cells to carry out all the processes of life such as growing, disposing of wastes, making new cells, and using food. (SCI – 6.2)</p> <p>PO1. Read a variety of articles, which address the relationship of human energy requirements to diet. Develop tables which describe the content (e.g., fiber, fat, carbohydrates, protein) of the foods routinely consumed by the class.</p> <p>PO3. List the daily activities of the class and their energy requirements (rank order from highest to lowest) and describe the various diets, which satisfy the energy required to support such activities.</p>

Students understand the characteristics of living things, the diversity of life and how organisms change over time in terms of biological adaptation and genetics. Students understand the interrelationships of matter and energy in living organisms and the interactions of living organisms with their environment. Students understand how knowledge about life processes can apply to improving human health and well being. (DEL – SCI6)

Strand: Survival Structure / Function Relationship		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>1. Understand how the human body has parts that perform many different functions. (SCI – 6.2)</p> <p>PO1. Identify the five senses and the function of each (e.g., eyes for seeing).</p> <p>PO2. Explain how the senses work together to seek, find and consume food.</p>	<p>1. Understand how living things have structures that function to help them reproduce, grow, and survive in different kinds of places. (SCI – 6.2)</p> <p>PO1. Observe and describe how organisms such as plants or crickets, snails or fish take in substances, grow, reproduce, and respond to stimuli. Explain how different structures perform specific functions in order for the organism to meet its need for survival.</p>	<p>1. Understand how the basic unit of all living organisms is the cell. Different cells specialized to perform various tasks and cells similar in shape and functions are organized into groups (e.g., muscle cell, motor nerve cells). (SCI – 6.10)</p> <p>2. Understand that cells contain a set of observable structures called organelles (e.g., cell wall, cell membrane, nucleus, chloroplast, and vacuole) that control the various functions of the cell such as structural support, photosynthesis and storage of materials.</p> <p>PO1. Use microscopes to observe a plant or animal cell. Draw the cells and label any observable organelles.</p> <p>PO2. Describe how specific groups of cells differ in structure from other groups of cells.</p> <p>PO3. Explain how the distinctive structure of the cells determines their function.</p>

Strand: Life Processes

Students understand the characteristics of living things, the diversity of life and how organisms change over time in terms of biological adaptation and genetics. Students understand the interrelationships of matter and energy in living organisms and the interactions of living organisms with their environment. Students understand how knowledge about life processes can apply to improving human health and well being. (DEL – SCI6)

Strand: Characteristics of Living Things		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of third grade student will be able to:</p> <ol style="list-style-type: none"> Identify characteristics of plants and animals (including extinct organisms) that allow them to live in specific environments. (SCI – 6.1) <ul style="list-style-type: none"> PO1. Identify adaptations of plants that allow them to live in specific environments. PO2. Identify adaptations of animals that allow them to live in specific environments. PO3. Keep a journal describing living things and where they live. Identify the basic structures and functions of plants and animals. (SCI – 6.1) <ul style="list-style-type: none"> PO1. Identify basic animal structures. PO2. Describe the functions of basic animal structures. PO3. Identify basic plant structures. PO4. Describe the functions of basic plant structures. Recognize and distinguish similarities and differences in diverse species. (SCI – 6.1) <ul style="list-style-type: none"> PO1. Identify observable similarities among diverse species (e.g., number of legs, body coverings, size). PO2. Identify observable differences among diverse species. PO3. Compare the observable similarities and differences among diverse species. 	<p>By the end of fifth grade students will be to:</p> <ol style="list-style-type: none"> Students know and are able to do all K – 3 skills. 	

Standard 5: Earth's Dynamic Systems

Strand: Technology and Applications		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>1. Demonstrate an understanding of how technology enables meteorologists to predict changing weather patterns. Weather forecasts influence decisions concerning human activity (SCI – 5)</p> <p>PO1. Use a variety of simple instruments such as a thermometer, barometer, wind vane, and rain gauge to measure changes in the weather. Construct charts and graphs which track weather changes on a daily basis. Relate how changes in the weather influence daily activities.</p> <p>PO2. Construct charts and graphs which track weather changes on a daily basis.</p> <p>PO3. Relate how changes in weather influence daily activities</p>	<p>1. Explain why many of Earth's resources are limited or non-renewable. Careful planning and use are necessary to extend their availability (SCI – 5.1)</p> <p>PO1. Design a survey for friends and family to determine how they use a variety of natural resources such as water, fossil fuels, metals, and air. Analyze the survey results to determine ways of extending the availability of natural resources (e.g., recycling, conserving, changing habits, using an alternative product)</p>	<p>1. Demonstrate how instrumentation e.g., pH meters, water analysis kits) and computer models enable the measure and analysis of environmental pollution. Sources of environmental pollution can be tracked using maps and satellite imagery (SCI – 5.1)</p> <p>PO1. Use technology (e.g., maps, satellite imagery, and instrumentation) to locate possible sources of environmental pollution. Compare sources with meteorological data to locate the probable origin of regional contamination.</p>

Standard 5: Earth's Dynamic Systems

All students will study and learn to identify components of the various Earth systems and understand the changes and patterns that result from interactions within and between these systems. (DEL – 5)

Strand: Interactions Among Earth's System		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
		<p>PO1. Use U.S. weather maps to identify and describe air masses, fronts, and their movement.</p> <p>PO2. Perform daily weather measurements over an extended period of time using a variety of instruments (e.g., barometer, anemometer, sling psychrometer). Compare and contrast the measurements to local and regional weather data.</p> <p>PO3. Discuss the origin and impact of the great storms of the east coast (e.g., hurricanes, "nor'easter", snow and ice storms). Assess adequacy of emergency planning procedures to respond to the damage, which such storms can cause.</p> <p>5. Explain how ocean currents affect the weather and long term climatic patterns of a region. Large bodies of water (oceans, the Great Lakes, inland seas) can also affect the weather and climate of an area. (SCI – 5.5)</p> <p>PO1. Investigate the influence of the Atlantic Ocean on erosion of coastal areas, commerce, and the climate of Delaware.</p> <p>PO2. Examine maps of ocean currents and trace the origin and flow of such currents to explain the transport of heat energy. Speculate which currents have dominate influence on the Delaware coast</p>

Standard 5: Earth's Dynamic Systems

All students will study and learn to identify components of the various Earth systems and understand the changes and patterns that result from interactions within and between these systems. (DEL – 5)

Strand: Interactions Among Earth's System		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
		<p>PO2. Design tests to study the effects of physical processes (freezing and thawing of water, erosion) and chemical processes (oxidation, acidification) on the structure of rocks, and speculate on the impact of climate, topography, and airborne and water pollutants on these processes.</p> <p>PO3. Investigate factors influencing erosion and deposition and relate the results to local areas of erosion. Apply this information to economic decisions concerning the use of land for construction, farming, industry, and recreation.</p> <p>3. Explain the cycling of water in the atmosphere is driven by energy transfer processes, such as convection and radiation, and is constantly changing the location and phase of water. (SCI – 5.3)</p> <p>PO1. Design simple experiments to demonstrate the influence of wind and temperature on the hydrologic cycle.</p> <p>4. Describe the uneven heating and cooling of Earth's surface produce various air masses, which differ in density, humidity, and temperature. The origin, movement, and interaction of these air masses result in significant weather changes. (SCI – 5.4)</p>

Standard 5: Earth's Dynamic Systems

All students will study and learn to identify components of the various Earth systems and understand the changes and patterns that result from interactions within and between these systems. (DEL – SCI-5)

Strand: Interactions Among Earth's System		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>1. Describe the surface of the Earth changes constantly. Some of these changes happen slowly and are difficult to detect on a daily basis. Other changes happen quickly and result from events such as heavy rainstorms, ice storms, hurricanes, and tornadoes. (SCI – 5.1)</p> <p>PO1. Cite a disturbance or natural hazard, which has recently happened or is in progress locally. Such events could include a hurricane, snowstorm, "nor'easter", drought, tornado, or heat wave. Identify changes that have occurred to the surroundings as a result of this event and the impact on wild life, human activity, and the economy.</p> <p>2. Describe how repeating patterns can be found in weather and seasonal changes. Plant, animal, and human activities are influenced by these patterns. (SCI – 5.2)</p> <p>PO1. Describe weather conditions (e.g., sunny, foggy, rain) and the impact these conditions have on plant, animal, and human activity.</p>	<p>1. Describe geologic features of Earth's surface such as mountains, plateaus, plains, lakes, streams, oceans, and glaciers are constantly changing, making the surface of the land different from location to location. (SCI – 5.1)</p> <p>PO1. Use globes, maps, and posters to identify major landforms and geological features. Compare and contrast the topography of Delaware to the topography of other states.</p> <p>PO2. Explore changes occurring in local surroundings that are brought about by natural forces (e.g., erosion, wind, ice, and sunlight) and by the activity of plants, animals, sea life, and humans. Distinguish between changes, which occur rapidly, and those, which occur over longer periods of time (years, decades, or longer).</p> <p>PO3. Simulate the effect of erosion of the Earth's surface using small trays of soil or stream tables. Relate the results of this simulation to changes that take place in local surroundings due to erosion.</p>	<p>1. Explain how volcanoes, earthquakes, and other mountains-building processes are responsible for most major features of the Earth's crust. (SCI – 5.1)</p> <p>PO1. Plot the location of earthquakes, volcanoes, trenches, and oceanic ridges to account for patterns of activity associated with tectonic plates.</p> <p>2. Explain how rocks are changed by erosion and deposition and by exposure to heat and pressure. There are a variety of physical and chemical processes that lead to the decomposition and breakdown of rocks and the eventual formation of soils and sediments. These soils and sediments can then be transported to other places by wind, flowing water, waves, and ice. (SCI – 5.2)</p> <p>PO1. Design and build models to demonstrate how wind and water shape the land. Explain how erosional agents such as water and ice produce distinctive landforms (e.g., water and bad lands, ice and glacial valleys, waves and sea cliffs)</p>

Standard 5: Earth's Dynamic Systems

All students will study and learn to identify components of the various Earth systems and understand the changes and patterns that result from interactions within and between these systems. (DEL – SCI-5)

Strand: Components of Earth		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>3. Describe how water exists in different states (solid, liquid, and gas) and in different forms such as rain, snow, hail, and vapor. Water is stored in reservoirs, lakes, oceans, ponds, bays, and ice and is a valuable natural resource essential to all living things. (SCI – 5.3)</p> <p>PO1. Use a globe or map to locate where water is stored locally and elsewhere in the world. Identify how life style and human activity are different for people who live near water vs. those who don't.</p> <p>PO2. Identify all the ways people use water. Construct posters or collages, which promotes the responsible use of water resources. Use the posters to make a presentation to students in other classrooms and to display ideas about wise water use.</p>	<p>3. Demonstrate how water exists in the air as water vapor (e.g., clouds and fog) and is found on the surface as a liquid or solid, and below the surface as ground water. (SCI – 5.3)</p> <p>PO1. Design simple tests to investigate factors that affect the rate of evaporation and condensation (e.g., temperature, sunlight, and wind). Use the results to explain how atmospheric conditions determine the rate of evaporation and condensation.</p>	<p>PO1. Perform daily weather measurements over an extended period of time using a variety of instruments (e.g., barometer, anemometer, sling psychrometer). Compare and contrast the measurements to local and regional weather data.</p> <p>4. Explain water falling to Earth flows over the surface as run-off and collects in ocean basins, river, lakes, ice caps, and underground. Water stored underground (sub-surface) and water stored above ground (surface) form a continuum, each supplying water to the other. Human activity and natural events can introduce chemicals affecting the quality of the water supply (SCI – 5.4)</p> <p>PO1. Identify water sources for the Delaware Estuary and the impact of human activities upon it.</p> <p>PO2. Determine the compositions and suitability for use of various local water sources (e.g., rivers, streams, and wells). Investigate reasons for differences in the results and determine how regulations affect water use.</p>

Standard 5: Earth's Dynamic Systems

All students will study and learn to identify components of the various Earth systems and understand the changes and patterns that result from interactions within and between these systems. (DEL – SCI-5)

Strand: Components of Earth		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of third grade students will be able to:</p> <ol style="list-style-type: none"> Understand that Earth's materials include rocks, soil, water, and air. Differences exist in all these materials and these differences can be used to sort and classify them. (SCI – 5.1) <p>PO1. Identify and collect a variety of Earth's materials, such as rocks, sand, soil, and water (salt water, rain water, tap water). Develop classification systems that allow these materials to be sorted into groups with similar properties.</p> <p>PO2. Collect and label soil samples taken from various locations surrounding the school block. Record and describe in your journal the nature of the location and surroundings for these samples. Use a magnifier or other tests to examine the samples. Record the differences (e.g., color, grain size, texture, ability to hold water) and develop reasonable explanations why these differences are important. The surface of Earth is surrounding by the atmosphere, a thin layer of air that supports life and has physical properties that are measurable and predictable (SCI – 5.2) <p>PO1. Keep daily records of temperature and weather conditions and use these records to identify patterns over short and long period of time</p> </p>	<p>By the end of fifth grade students will be able to :</p> <ol style="list-style-type: none"> Explain how rocks are natural combinations of one or more minerals and are formed under a variety of conditions. Rocks, minerals, and soils are classified according to their physical properties. (SCI – 5.1) <p>PO1. Sort and classify samples of Earth materials according to physical properties such as color, luster, density, particle size, and shape. Differentiate between those materials that are composed of a single substance (mineral) and those that are composite materials (e.g., rocks, soil, and sand). Describe how soil is composed of rock material and of rock material broken down by weathering an erosion and organic material that is decomposed. A soil's composition varies from place to place and helps determine which plants grow in a particular area. (SCI – 5.2) <p>PO2. Conduct simple investigations to determine how different types of soil (e.g., sand, clay, organic) affect plant growth and development. Use the results of this investigation to depend the reasons a farmer might fertilize or irrigate crop land.</p> </p>	<p>By the end of eighth grade students will be able to:</p> <ol style="list-style-type: none"> Describe how rocks and minerals are classified according to their chemical and physical properties. Rocks also are classified according to how they are formed. <p>PO1. Sort and group rocks and minerals into natural classification systems using physical and chemical tests.</p> Explain how sedimentary rocks, which are made of particles from other rocks and organic remains, are laid down in horizontal layers. Fossilized remains and successive layering of sedimentary rocks provide evidence of the Earth's history. Absolute age is determined by radioactive dating. (SCI – 5.2) <p>PO1. Construct model and geological profiles to demonstrate the age relationship of sedimentary rock layer</p> <ol style="list-style-type: none"> Explain how the atmosphere has properties that can be observed, measured, and used to predict changes in weather and to identify climatic patterns. (SCI – 5.3)

Standard 4: Earth in Space

Students will learn that even though the distributions and types of materials differ from planet to planet, the chemical composition of material is identical and the same laws of science apply across the universe.

Strand: Technology and Applications		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
	<p>By the end of the fifth grade students will be able to:</p> <ol style="list-style-type: none"> 1. Explain how people who live and work in space need special clothing and equipment, designed and constructed by Delaware scientists to protect themselves from the extreme conditions in space. <p>PO1. Examine picture in a space suit or samples of materials used in its construction. Explain the different parts, their functions, and why certain materials were chosen for these parts.</p>	<p>By the end of the eighth grade students will be able to:</p> <ol style="list-style-type: none"> 1. Understand that technology allows scientists to explore the Solar System and to observe and measure features of the Earth, Moon, and other solar objects. <p>PO1. Examine a variety of resources (e.g., NASA photographs, satellite images) to identify some interesting features of the Moon and other planets (e.g., craters, Red Spot of Jupiter).</p> <p>PO2. Study photographs or satellite images of Earth to identify unique features of our planet (e.g., continents, land forms, weather systems). Discuss what can be learned and predicted by studying this information.</p>

Standard 4: Earth in Space

Students will learn that even though the distributions and types of materials differ from planet to planet, the chemical composition of material is identical and the same laws of science apply across the universe.

Strand: Interactions in the Solar System		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade students will be able to:</p> <ol style="list-style-type: none"> 1. Demonstrate how every 24 hours the Earth makes a full rotation on its axis which causes the day and night cycle. (SCI – 4) <p>PO.1 Use spherical objects and a light source to develop models which demonstrate the cycle of day and night in Earth's rotation.</p> <ol style="list-style-type: none"> 2. Identify the objects in the sky such as the Sun, Moon, and stars and classify them as cyclic. (SCI – 4) <p>PO1. Observe the day and night sky over an extended period of time. Record or chart the observations and identify those objects whose patterns of movement are cyclic.</p>	<p>By the end of the fifth grade students will be able to:</p> <ol style="list-style-type: none"> 1. Demonstrate how the Earth is one of several planets that orbit the Sun. As the Earth orbits the Sun different patterns of stars can be seen in different seasons. (SCI – 4) <p>PO1. Select several constellations and, through the use of models, illustrate how the Earth's position relative to the Sun determines which constellations are visible at different times of the year.</p> <ol style="list-style-type: none"> 2. Explain how rotation of Earth on its axis once every 24 hours causes day and night and makes the Sun, Moon, planets, and stars appear to move across the sky from east to west each day. (SCI – 4) <p>PO1. Study the shadow of the school flagpole. Observe and measure the shadow different times of the day. Determine when the shadow is shortest or longest, what direction the shadow points in relation to the Sun, and what path the Sun appears to take.</p> <p>PO2. Observe and record the apparent path of the Sun and chart the times and directions of sunrise and sunset over an extended period of time</p>	<p>By the end of the eighth grade students will be able to:</p> <ol style="list-style-type: none"> 1. Explain how the nuclear processes that take place in the Sun continuously convert matter to energy. A small portion of this energy which is intercepted by Earth drives biological, chemical, and physical processes on Earth. (SCI – 4) <p>PO1. Design experiments to demonstrate that light from a source such as the Sun has color and brightness and directions of travel. Explain the colors and their order in terms of energies and wavelength – See also <u>Energy and Its Effects</u>.</p> <ol style="list-style-type: none"> 2. Conduct an experiment that shows how the gravitational attraction that exists between all forms of matter holds objects on Earth, causes tides, keeps the Solar System and galaxy together, and controls the movement of the planets in the Solar System. <p>PO1. Compare a person's weight and mass on the Earth, on the Moon, and in an orbiting satellite and explain the similarities and differences. Discuss the importance of these to the work of astronauts.</p>

--	--

photographs, computer simulations, satellite images) to compare the physical properties (e.g., size, surface, features, tilt of axis) of the planets as well as their similarities and differences.

3. Explain how the yearly revolution of earth in its orbit around the sun and the tilt of earth on its axis (23.5 degrees) cause the angle at which sunlight strikes the Earth to vary at different locations. This causes differences in the heating of Earth's surface, which produces seasonal variations in weather and a variety of climates. (SCI-4.1)

PO1. Use the Earth/Sun/Moon model to demonstrate how seasonal changes relate to the tilt of the Earth in relationship to the earth's orbit around the Sun and to predict the season in different hemispheres of the earth at any given time.

Standard 4: Earth in Space

Students will learn that even though the distributions and types of materials differ from planet to planet, the chemical composition of material is identical and the same laws of science apply across the universe.

Strand: Solar System Model		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade students will be able to</p> <ol style="list-style-type: none"> Identify objects in the Solar System including the Sun, Moon, planets, and comets. Most of the objects are separated by vast space and enormous distances. (SCI – 4.1) <p>PO1. Use scale sized spherical objects placed at different distances to model the Solar System.</p> <p>PO2. Demonstrate the size and distance between the planets.</p> <ol style="list-style-type: none"> Recognize the size of an object appears to change as the observer moves closer to or farther away from the object. 	<p>By the end of the fifth grade students will be able to:</p> <ol style="list-style-type: none"> Demonstrate the Earth's position relative to the sun's effects on Earth. (SCI – 4.1) <p>PO1. Prepare a model or design which demonstrates the tilt of Earth in relation to the Sun and use it to explain seasons at different locations on Earth.</p>	<p>By the end of the eighth grade students will be able to:</p> <ol style="list-style-type: none"> Explain how the Solar System forms part of the Milky Way Galaxy, which is one of many galaxies that comprise the Universe. Some galaxies are so far that their light takes billions of years to reach Earth. (SCI – 4.1) <p>PO1. Use scale drawing or triangulation to determine distance between specific points. Explain how these methods can be used to estimate astronomic distances.</p> <p>PO2. Use a variety of visual aids to study the approximate location of the Solar System in the galaxy. Explain how the Solar System moves relative to the Milky Way Galaxy.</p> <ol style="list-style-type: none"> Explain how the nine planets, their respective Moon(s), comets and many asteroids, and meteorites orbit the sun which is the gravitational center of the Solar System. (SCI – 4.1) <p>PO1. Construct scale models of the Solar System. Use the models to describe the relative sizes of the planets (as viewed from the Earth) and their distances from the sun.</p> <p>PO2. Use a variety of resources (e.g., NASA</p>

Standard 3 Energy and Its Effects

All students will study, discuss, and learn the factors that govern the flow of energy throughout the universe, the transformation of natural resources into useful energy forms, and the conservation of energy during interaction with materials. (DEL – SC3)

Strand: Interaction of Energy with Materials		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
		<p>By the end of the eighth grade students will be able to:</p> <ol style="list-style-type: none"> 1. Demonstrate how energy can travel as waves which are characterized by wave length, frequency, amplitude, and speed. Waves have common properties of absorption, reflection, when they interact matter. They are either mechanical (e.g., sunlight, radio waves); only electromagnetic waves will travel through a vacuum. (SCI – 3.1) <p>PO1. Generate waves (e.g., in water) and demonstrate common wave properties when the waves interact with surfaces and with each other.</p> <ol style="list-style-type: none"> 2. Explain the resistance to flow of an electric current through a material depends on the mobility of electrons in the material. The resistance to flow converts electric energy to heat energy. (SCI – 3.2) <p>PO1. Compare the efficiency of different materials as electrical conductors and insulators.</p>

88
Curriculum Alignment

	<p>PO1. Observe and describe changes in kinetic and potential energy in common activities such as bouncing a ball or swinging on a swing.</p> <p>3. Explain how the motion of an object can be described as its change in position, direction, and speed relative to another object. (SCI – 3.3)</p> <p>PO1. Determine the speed of the objects (e.g., students running, walking, riding a bike) using measurements of distance and time. Compare the results with both numerically and graphically.</p> <p>4. Demonstrate how simple machines (e.g., levers, inclines, pulleys, and gears) are used to change the force on an object and its speed or direction in order to make work easier. (SCI – 3.4)</p> <p>PO1. Explain and demonstrate how common tools (e.g. pliers, crowbars, hammers, pulleys, and can openers) incorporate simple machines in their designs. Discuss the forces and motions involved.</p> <p>PO2. Use simple machine principles to design a device, which performs a task (e.g. lift a weight or move a heavy object) that cannot be accomplished without the machine. Explain the forces and motions involved.</p>	<p>PO1. List a variety of energy sources which provide alternatives to the use of fossil fuels, compare their relative ease of renewability, and explain their advantages and disadvantages. Discuss the various sources of energy used around the world and explain the basis for the differences.</p> <p>3. Describe how most energy used by industrial societies is derived from fossil fuel sources. Such sources are inherently limited on the earth and are unevenly distributed geographically. Responsible use of energy requires consideration of energy availability, efficiency, environment issues, and alternative sources. (SCI – 3.3)</p> <p>PO1. Use available information (e.g., from power companies) to conduct a personal audit of energy consumed by a family. Determine the amounts, types, and cost of energy (e.g., electricity, oil, gas, gasoline) used and the total energy use over a given period. Considering the efficiency of different applications, propose approaches to reduce energy use by a significant amount.</p>
--	---	--

Standard 3: Energy and Its Effects

All students will study, discuss, and learn the factors that govern the flow of energy throughout the universe, the transformation of natural resources into useful energy forms, and the conservation of energy during interaction with materials. (DEL – SC3)

Strand: Force and Motion		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
	<p>By the end of fifth grade students will be able to:</p> <ol style="list-style-type: none"> 1. Demonstrate how force must be used to change speed or direction (or both) of a moving object. In the absence of such a force, the object will continue to move with the same speed and in the same direction. Forces have directions and magnitudes that can be measured. Any change in motion depends upon the amount of force causing the change and the mass of the object. (SCI – 3.1) <p>PO1. Measure and compare the magnitude and direction of forces used in common activities such as lifting objects, stretching springs or rubber bands, and arm wrestling.</p> <p>PO2. Give examples which show how the relationship among force, mass, and acceleration are important in common situation (e.g., hammering a nail, comparing rates at which a car and a heavily loaded truck can pull away from a stop sign).</p> <ol style="list-style-type: none"> 2. Explain how mechanical energy comes from the motion and/or the position of physical objects. The work done on an object depends on the applied force and on the distance that the object moves. 	<p>By the end of the eighth grade students will be able to:</p> <ol style="list-style-type: none"> 1. Explain how technological advances throughout history (e.g., electric light, steam engine, internal combustion engine, radio, TV) have led to new applications which use different forms of energy. Such advances have led new applications which use different forms of energy, and in some cases, unanticipated effects on society. (SCI – 3.1) <p>PO1. Work in groups to investigate and chart the impact of the development of the internal combustion engine (or other major change in technology) on life in America. Identify and report on the advantages and the unintended or unexpected, consequences which resulted.</p> <ol style="list-style-type: none"> 2. Describe how energy is obtained from a variety of source, some of which are finite and some of which are renewable. The major source of energy for society is chemical energy stored in fossil fuels created many years ago through the process of photosynthesis. Another source is nuclear energy. Renewable sources (e.g., wind, geothermal, waves, biomass) vary in their availability and ease of use (SCI – 3.2)

PO1. Observe and discuss ways in different forms of energy (e.g., electricity, heat, sunlight, microwaves) can be used safely.

PO1. List a variety of energy sources which provide alternatives to the use of fossil fuels, compare their relative ease of renewability, and explain their advantages and disadvantages. Discuss the various sources of energy used around the world and explain the basis for the difference.

3. Describe how most energy used in industrial societies is derived from fossil fuel sources. Such sources are inherently limited on the earth and are unevenly distributed geographically. Responsible use of energy requires consideration of energy availability, efficiency, environmental issues, and alternative sources. (SC1 - 3.3)

PO1. Use available information (e.g., from power companies) to conduct a personal audit of energy consumed by a family. Determine the amounts, types, and costs of energy (e.g., electricity, oil, gas, gasoline) used and the total energy use over a given period. Considering the efficiency of different applications, propose approaches to reduce energy use by a significant amount.

Standard 3: Energy and Its Effects

All students will study, discuss, and learn the factors that govern the flow of energy throughout the universe, the transformation of natural resources into useful energy forms, and the conservation of energy during interaction with materials. (DEL – SC13)

Strand: Production/Consumption/Application of Energy		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade students will be able to:</p> <ol style="list-style-type: none"> Describe how people burn fuel such as wood, oil, coal, or natural gas or use electricity to cook their food and warm their homes. (SCI – 3.1) <p>PO1. Compare life today with life in Colonial America; classify and explain how energy is used differently today (e.g., transportation, lighting, heating, communication, manufacturing).</p> <ol style="list-style-type: none"> Understand how production of heat, light, and electricity uses natural resources. <p>PO1. Develop a diagram that traces the use of natural resources (e.g., oil, coal, gas) and their conversions into a variety of energy applications (e.g., heating, lighting, and other electrical uses). Speculate which application consumes the greatest amount of natural resources and identify the steps that could be taken home and at school to reduce the consumption of these resources.</p> <ol style="list-style-type: none"> Explain how heat, light, electricity, or any form of energy can be harmful or even dangerous if misused. 	<p>By the end of fifth grade students will be able to:</p> <ol style="list-style-type: none"> Explain how society uses energy to perform work and improve the quality of life. (SCI – 3.1) <p>PO1. Describe how and where electricity is generated for the local community. Use a map that shows the sources of raw materials, and explains the transportation modes required to get raw materials to the power plant.</p>	<p>By the end of the eighth grade students will be able to:</p> <ol style="list-style-type: none"> Explain how technological advances throughout history (e.g., electric light, steam machine, internal combustion engine, radio, TV) have led to new applications which use different forms of energy. Such advances have led to increased demand for energy, and in some cases, unanticipated effects on society. (SCI – 3.1) <p>PO1. Work in groups to investigate and chart the impact of the development of the internal combustion engine (or other major change in technology) on life in America. Identify and report on the advantages and the unintended or unexpected consequences which resulted.</p> <ol style="list-style-type: none"> Describe how energy is obtained from a variety of sources, some of which are finite and some of which are renewable. The major source of energy for society is chemical energy stored in fossil fuels created many years ago through the process of photosynthesis. Another source is nuclear energy. Renewable sources (e.g., wind, geothermal, waves, biomass) vary in their availability and ease of use. (SCI – 3.2)

	<p>3. Explain how materials are able to conduct and transfer heat. (SCI – 3.3)</p> <p>POI. Work in small groups to design tests to determine the best type of cup (e.g., styrofoam, ceramic mug, glass cup) to use to keep hot chocolate warm. Measure the heat loss through a variety of cups and use graphs of the result to support the team's choice of cup.</p>	<p>radiation, and conduction in weather changes- see also <u>Earth's Dynamic Systems</u></p>
--	--	--

Standard 3: Energy and Its Effects

All students will study, discuss, and learn the factors that govern the flow of energy throughout the universe, the transformation of natural resources into useful energy forms, and the conservation of energy during interaction with materials. (DEL – SC13)

Strand Transformation/Conservation of Energy		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
	<p>By the end of fifth grade students will be able to</p> <ol style="list-style-type: none"> 1. Explain why most of the energy reaching the Earth's surface comes from the sun as light. It is stored, transferred, or transformed in a variety of ways. Some of the Sun's light is transformed into heat when it hits object. (SCI – 3.1) <p>PO1. Demonstrate how the sun's energy can be used to perform certain tasks (i.e., melting ice faster, making sun tea, activating a photo cell in a calculator or other devices, burning a hole in a piece of paper, and heating a room).</p> <ol style="list-style-type: none"> 2. Demonstrate how warmer things are put in cooler ones, the warm ones lose heat, and the cool ones gain it until they are all at the same temperature. (SCI – 3.2) <p>PO1. Use a light bulb as a heat source and a thermometer as a detector to compare the rate of heat flow through different materials (e.g., aluminum, air, different colored papers, cloth insulation).</p> <p>PO2. Explore how heat flows from hotter regions to colder regions and reduce temperatures differences</p> <p>PO3. Discuss how these differences are used in everyday life</p>	<p>By the end of the eighth grade students will be able to:</p> <ol style="list-style-type: none"> 1. Demonstrate how almost all events in the universe involves the transformation of one form of energy into another form with the release of heat. Regardless of the transformation, the total amount of energy remains constant. (SCI – 3.1) <p>PO1. Measure and qualitatively compare the heat changes involved in different kinds of energy transformation (e.g., temperature increases from different sizes of incandescent and fluorescent lights, temperature increases when different colored objects are exposed to the sun, temperature increases when a cup of metal balls is vigorously shaken or a nail hammered).</p> <ol style="list-style-type: none"> 2. Heat energy is transported through materials by conduction, by convection in fluids (e.g., air or water), or across space by radiation. The addition or removal of heat from a material changes its temperature or its physical state (e.g., ice melting). (SCI – 3.2) <p>PO1. Use weather maps and reports over an extended period of time to show the effect of uneven heating and cooling of the Earth's surface on weather. Discuss the role of</p>

		<p>organic materials (e.g., wax, peanut, polyethylene). Discuss the importance of chemical energy as an energy source to meet societal needs in transportation, heating, lighting, batteries, and food;</p> <p>PO2. Measure the changes in temperature resulting from chemical reaction which release and absorb heat (e.g., "HOT PACK" and a "COLD PACK"). Discuss the results in terms of chemical and energy changes involved.</p>
--	--	---

<p>pull, the greater the change in position, motion, and direction. (SCI – 3.3)</p> <p>PO1. Keep a journal describing all daily activities that require the use of force (pushing or pulling) in order to move an object or to change the direction of a moving object.</p> <p>4. Demonstrate how moving objects can exhibit different kinds of motion such as fast, slow, back and forth, circular, and zig-zag. The application of pushes or pulls is required to produce any change in the type of motion, including stopping and starting an object in motion. (SCI – 3.4)</p> <p>PO1. In your journal identify all kinds of moving things such as birds, insects, automobiles, fans, swings, bicycles, and baseballs; describe and discuss the different ways in which these objects move or can be made to move.</p> <p>5. Some forces (e.g., magnetism, static electricity) can make things move without touching them.</p> <p>PO1. Identify materials in the home or classroom that are attracted to or moved by a magnet. Identify those materials which are not attracted to or moved by a magnet. Discuss the common features of both groups. (SCI – 3.5)</p>	<p>the sand in each container. Cover the containers and shake them vigorously 100 times, 200 times, or more. Compare and record the temperature in each of the containers and graph the results.</p> <p>3. Demonstrate how electricity in circuits can produce light, heat, sound, and magnetic effects. Electrical circuit require a complete loop through which the electrical current pass. (Natural Science Education Standards, Nov. 1994) (SCI – 3.3)</p> <p>PO1. Use a battery, wires, and a light (or electric motor or buzzer) to demonstrate the requirements for a complete electric circuit. Observe the effect of replacing a section of wire with other metals (e.g., aluminum, steel) and with non-metals (e.g., string, cloth, plastic).</p> <p>4. Describe when an object is set in motion by a force, its position is defined with reference to the distance it travels and the period of time it takes to travel that distance. Speed is the measure of the distance traveled by a moving object in a given period of time (distance divided by time) (SCI – 3.4)</p> <p>5. Demonstrate why force must be applied to change the speed or direction of a moving object. The greater the force, the greater the change in motion. (SCI – 3.5)</p> <p>PO1. Vary the conditions of a tug-a-war (or other example of force) to observe the affect of force on the motion of objects. Identify the source of the force and the motion that results.</p>	<p>voltage through a complete circuit. Electrical energy can be readily generated, transmitted over great distances, and transformed into heat, light, sound, and motion. Electrical systems can be designed to perform a variety of tasks, using series, parallel, or combination circuits. (SCI – 3.1)</p> <p>PO1. Design and assemble simple series and parallel circuits. Cite the advantages and applications of each.</p> <p>PO2. Research and compare various sources of energy (e.g., waterpower, fossil fuel, nuclear) for the generation of electric power. Discuss the advantages and disadvantage of each.</p> <p>3. Explain how static electricity represents Potential energy stored in a collection of separated negative and positive charges. Similar charges repel each other; opposite charges attract each other and can lead to a sudden flow of electrons (e.g., a spark, a lighting bolt). (SCI – 3.3)</p> <p>PO1. Generate static electricity from various sources (e.g., by rubbing a plastic tube with a cloth) and investigate conditions that promote its production. Discuss the application and hazards of static electricity</p> <p>4. Demonstrate the chemical energy stored in Elements and compounds. In most chemical reactions, energy is released or added to the system in the form of heat, light, electrical, or mechanical energy. (SCI – 3.4)</p> <p>PO1. Measure the energy content of typical</p>
--	--	---

Standard 3: Energy and Its Effects

All student will study, discuss, and learn the factors that govern the flow of energy throughout the universe, the transformation of natural resources into useful energy forms, and the conservation of energy during the interaction with materials. (DEL-SC13)

Strand: Forms/Sources of Energy		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade students will be able to:</p> <ol style="list-style-type: none"> Understand why the sun is the source of heat and light that warms the earth. (SCI-3.1) <p>PO1. Investigate the influence of the sun on temperature. Record and compare air and water temperatures at day and night, temperatures at various times of day, and temperatures on a cloudy day.</p> <ol style="list-style-type: none"> Demonstrate how sound is produced when glasses filled with different amounts of water, or different sized bells, in order to create objects vibrate. Various characteristics of sound such as loudness/softness and high pitch/low pitch can be changed by altering the material producing the sound. (SCI - 3.2) <p>PO1. Experiment with strings of different lengths differences in sound. Based on these experiments, predict the kind of sounds that would be created with additional variations of the experimental set-ups.</p> <ol style="list-style-type: none"> Demonstrate how force is any push or pull exerted from one body to another. Pushes and/or pulls change the position, motion, direction (and occasionally the shape) of an object. The greater the push or 	<p>By the end of the fifth grade students will be able to:</p> <ol style="list-style-type: none"> Explain why light is a form of energy which is visible to the eye, spreads from a source, and travels in straight lines. Light is transmitted, reflected, refracted, or absorbed by different materials. Materials that do not transmit light cast shadows. (SCI-3.1) <p>PO1. Experiment with different materials to determine which one transmit light well, which partially transmit light, and which cast shadows (e.g., glass, clear plastic, cloudy plastic, paper). Observe the changes in shadows at different distances from the light source and at different angles between a light source and object.</p> <ol style="list-style-type: none"> Explain why many objects, which give off light also produce heat. Heat can also be produced by electrical and mechanical machines and by one object rubbing against another. (SCI- 3.2) <p>PO1. Identify a variety of heat sources in school or at home. Discuss how this heat is created, whether the heat is beneficial or harmful, and the various methods that can be used to reduce or increase the amount of heat generated.</p> <p>PO2. Investigate and measure the heat produced by motion. Fill jars or tin cans about one-third full with dry sand and record the temperature of</p>	<p>By the end of the eighth grade students will be able to:</p> <ol style="list-style-type: none"> Explain how electromagnetic spectrum is composed of different wavelength domains. The radiation in the spectrum comes from various sources and spans energy levels from radio waves (longest wavelengths, lowest energy) through microwaves, infrared, visible, ultraviolet, x-rays (shortest wavelengths, highest energy). White light from the sun consists of a mixture of wavelengths and energies in the visible part of the electromagnetic spectrum (red to violet). (SCI - 3.1) <p>PO1. Demonstrate the existence of the colored components of white light by using a prism or diffraction grating. Explain the colors and their order in terms of energies and wavelengths.</p> <p>PO.2 Identify uses of non-visible forms of electromagnetic radiation such as microwaves, UV, and x-rays. Discuss the relationship between the energy of each form of radiation as well as its application and potential hazards.</p> <ol style="list-style-type: none"> Electrical energy results from the movement of electric charges (electrons) driven by a

Standard 2: Materials and their Properties

All students will investigate, describe and analyze ways in which matter changes; describe how living things and human technology change matter and transform energy; explain how visible changes in matter are related to atoms and molecules; and how change in matter are related to changes in energy. (DEI. S2)

Strand: Transformation and Conservation of Matter
Early Elementary K-3

Late Elementary 4-5

Middle 6-8

By the end of the eighth grade students will be able to:

1. Demonstrate how substances react chemically in characteristic ways with other substances to form new substances. (S2 - 1)

PO1. Conduct a laboratory activity or observe everyday events (e.g., rusting, cooking) to see how the properties of new substances formed during chemical change differ from the properties of the original material. Report the observation that indicates the chemical change.

Standard 2: Materials and Their Properties

All students will investigate, describe and analyze ways in which matter changes; describe how living things and human technology change matter and transform energy; explain how visible changes in matter are related to atoms and molecules; and how change in matter are related to changes in energy (DEL S2)

Strand: Material Technology		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade students will be able to:</p> <ol style="list-style-type: none"> Demonstrate why some materials are more suitable than others for making a particular product or device. (S2 – 4) <p>PO1. Investigate the properties of materials that make them useful for a given purpose (sun glasses, water repellent)</p> <ol style="list-style-type: none"> Explain how technology has created new materials to help solve problems for some caused problems for others. <p>PO.1 Investigate examples of how material innovation solves one problem but causes another (plastic bottles, styrofoam cups).</p>	<p>By the end of fifth grade students will be able to:</p> <ol style="list-style-type: none"> Demonstrate how science and technology have created new materials that function and perform better than natural materials that benefit society. (S2 – 4) <p>PO1. Investigate examples of new material inventions and how and why they displace or enhance the performance of natural materials. (glass vs. plastic)</p>	

Curriculum Alignment
Science

Standard 2: Materials and their Properties

All students will investigate, describe and analyze ways in which matter changes; describe how living things and human technology change matter and transform energy; explain how visible changes in matter are related to atoms and molecules, and how change in matter are related to changes in energy. (DEI, S2)

Strand: Changes in Materials		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade students will be able to:</p> <p>1. Describe common physical changes in matter when exposed to heat, light, pressure, and chemicals or cutting, mixing, and grinding. (S2 – 1)</p> <p>PO1. Describe the physical changes:</p> <ol style="list-style-type: none"> newspaper to light section of apple to light candy to heat 	<p>By the end of fifth grade students will be able to:</p> <p>1. Demonstrate how the weight of an object changes when broken into parts; parts together weigh the same as the original object. (S2 – 1)</p> <p>PO1. Construct an object out of small parts, take them apart and rearrange them. Explain how the weight of an object is equal to the sum of the weight of the parts.</p> <p>2. Demonstrate how properties of materials and objects can be changed by interaction with air, moisture, light, heat, and other substances or materials. (S2 – 2)</p> <p>PO1. Conduct investigations properties that occur when common materials interact with the environment (melting, freezing, dissolving, weathering, shrinking, and rusting).</p>	

K-5
Curriculum Alignment
Science

materials that are only visible with the use of the magnifier. Discuss and compare observations with classmates.

PO1 Conduct experiments to differentiate between physical properties that are characteristics of materials and those that depend upon the amount of material present.

Standard 2: Materials and their Properties

All students will investigate, describe and analyze ways in which matter changes; describe how living things and human technology change matter and transform energy; explain how visible changes in matter are related to atoms and molecules; and how change in matter are related to changes in energy. (DEI, S2)

Strand: Properties and Structure of Materials		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>By the end of the third grade students will be able to:</p> <ol style="list-style-type: none"> Classify common objects and substances according to observable attributes: color, size, shape, weight, texture and composition such as wood, metal, plastic or cloth. (S2 –1) <p>PO1. Perform measurement and describe physical properties of common objects.</p> <p>PO2. Construct classification systems which sort and group objects by physical properties.</p> <ol style="list-style-type: none"> Demonstrate and explain that materials exist in different states (solid, liquid and gas) and change from one to another. (SC1 – 2) <p>PO1. Demonstrate that matter can change and exist in one or more states (show how heating and cooling change matter).</p> <ol style="list-style-type: none"> Demonstrate how objects and materials may be composed of structures too small to be seen without the use of a tool such as a magnifier. (SC – 3) <p>PO.1 Use a magnifier to inspect a variety of common objects and materials.</p> <p>PO2. Describe features of the objects or</p>	<p>By the end of fifth grade students will be able to:</p> <ol style="list-style-type: none"> Observe and measure properties of materials such as solubility, transparency, magnetic characteristics, strength, and the ability to conduct heat and electricity. It can to used to identify, and classify materials. (S2 – 1) <p>PO1. Use common household materials such as salt, sugar, flour and starch to design simple test to determine their solubility in common solvents such as water, oil and alcohol.</p> <ol style="list-style-type: none"> Perform simple investigations with and without magnification; record descriptions of investigations. Compare results and share with class. (S2 – 2) <p>PO1. Compare and contrast results of two investigations.</p>	<p>By the end of the eighth grade students will be able to:</p> <ol style="list-style-type: none"> Describe common chemical changes in terms of properties reactants and products. Common chemical changes-burning paper, rusting iron, formation of sugars during photosynthesis. Chemical changes- burning, photosynthesis, digestion, corrosion. (S2 –1) <p>PO1. Keep a journal over an extended period of time to identify and describe everyday such laboratory events that involve chemical reactions.</p> <p>PO2. Discuss how the properties of these changes differ from the properties of the original elements.</p> <ol style="list-style-type: none"> Explain physical changes in terms of the arrangement and motion of atoms and molecules. (S2 – 1) <p>PO1. Conduct a simple test to investigate the various factors that affect the melting of ice cubes. Record the results and identify the factor that contributed to differences in melting rate.</p> <ol style="list-style-type: none"> Differentiate physical properties of materials.

		<p>who work in science related occupations. Report and discuss the variety of opportunities for practicing science.</p> <p>PO2. Investigate research projects which have been or are presently conducted in the State of Delaware (e.g., agriculture, material, medical, marine. Explore how individuals with different abilities contribute to the success of these projects.)</p>
--	--	---

Standard 1: Nature and Application of Science and Technology

All students will ask questions that help learn about the world; design and conduct investigations using appropriate methodology and technology; learn from books and other sources of information; communicate their findings using appropriate technology; and technology; and reconstruct previously learned knowledge. (DEL-SCI)

Strand: History and Context of Science		
Early Elementary K-3	Late Elementary 4-5	Middle 6-8
<p>1. Recognize that scientific contributions have been made by all kinds of people in the world. (SCI – 1.1)</p> <p>PO1. Read short stories and describe how people and cultures, past and present, have made important contributions to scientific knowledge.</p> <p>PO2. Interview a scientist from the community. Record the scientist responses to questions.</p> <p>PO3. Use books, computers, films, and television programs to learn about science-based occupations.</p>	<p>1. Understand that scientific inquiry has produced much knowledge about the world, that much is still unknown, and that some things will always be unknown. (SCI – 1.1)</p> <p>PO1. Read and describe the results of scientific inquiry in the world (e.g., a timeline of inventions, progression from simple to mechanized tools, and understanding weather patterns).</p> <p>PO2. Use a variety of resources (books, films, computers, field trips, guest scientists) to explain how inquiry develops into future exploration of the unknown; to identify different kinds of science based occupations and the diversity of individuals involved.</p>	<p>1. Describe how people from different cultures have contributed to the history of science. (SCI – 1.1)</p> <p>PO1. Research the life, work, and contributions of a contemporary or historical scientist. Compare the background, human qualities, and factors that influenced the work of the scientist as part of a discussion of contemporary and historical variations of people, who practice science.</p> <p>PO2. Explore the historical under representation of women and minorities, many fields of science and engineering, and the strategies that education, business, and the government in Delaware are employing to increase their representation in the scientific work force of the future.</p> <p>2. Explain how people in the field of science are found in many occupations and institutions such as hospitals, universities, classrooms, industry, and farms. (SCI – 1.2)</p> <p>PO1. Participate in visits to local facilities where science is practiced or participate in classroom discussion with community individuals, including women and minorities.</p>

Entrepreneurial Content Standards And Benchmarks

I - Introduce R - Reinforce M - Mastery

Content Standard	Benchmarks																	
20. All students will understand techniques for enhancing a business's profitability through controlling crime, computerization and risk management.	149. Apply the 80/30 rule to inventory management.											I	R	R	M			
	150. Differentiate between perpetual inventory systems, visual inventory control systems, partial inventory control systems and physical inventory count.											I	R	R	M			
	151. Discuss the just-in-time inventory control technique.											I	R	R	R	M		
	152. Describe the problem and impact of employee theft.											I	R	R	R	M		
	153. Identify the common reasons for employee theft and methods to minimize its occurrence.												I	R	R	M		
	154. List the type of shoplifters and techniques for deterring them.												I	R	R	M		
	155. Discuss methods for securing a facility to decrease the risk of burglary.												I	R	R	R	M	
	156. Compare the advantages and disadvantages of computerization.												I	R	R	R	M	
	157. Summarize the steps to computerize a small business.													I	R	R	R	M
	158. Recognize the seven major software applications used among small business.												I	R	R	R	R	M
	159. Interpret the importance of computer security and how to achieve it.												I	R	R	R	R	M
	21. All students will understand the concepts of human resource management and the skills required for managing a growing business.	160. Understand the importance of preparing and planning for management succession.											I	R	R	R	R	M
		161. Examine the financial options available for smooth management succession.												I	R	R	R	M
		162. Analyze the major types of business insurance.												I	R	R	R	M
163. Perform a job analysis, which includes the creation of job descriptions and job specifications.													I	R	R	R	M	
164. Evaluate techniques available for recruiting the best													I	R	R	R	R	M

Entrepreneurial Content Standards And Benchmarks

I - Introduce R - Reinforce M - Mastery

Content Standard	Benchmarks													
	employees.													
	165. Compare the advantages and disadvantages of the various sources of potential employees.								I	R	R	R	R	M
	166. Explain the theoretical and critical aspects of determining employee compensation.											I	R	M
	167. Analyze the use of employee stock ownership plans.											I	R	M
	168. Understand the laws that directly impact the human resources management function.											I	R	M
	169. Recognize the need for redefining the role of management in a growing business.											I	R	M
2. All students will understand the legal aspects of small business management.	170. Discuss the benefits of owners becoming mentors and employee developers.											I	R	M
	171. Describe the strategic and operational challenges in a growth market.											I	R	M
	172. Examine the financial options available for smooth management succession.											I	R	M
	173. Define and explain the six elements of a contract.											I	R	M
	174. Summarize the major components of the Uniform Commercial Code.											I	R	M
	175. Interpret the workings of the law of agency.											I	R	M
3. All students will review basic concepts of economics and expound upon the knowledge of those concepts.	176. Explain the forms of bankruptcy.											I	R	M
	177. Describe the process of applying for a patent, trademark or copyright.											I	R	M
	178. Discuss the government regulation of business in competition and consumer protection.											I	R	M
	179. Understand the concept of scarcity and determine its effect on the creation of business opportunities.											I	R	M
	180. Evaluate entrepreneurial opportunities suggested for responding to a specific problem involving scarcity.											I	R	M
	181. Give examples of the productive resources needed to take advantage of a specific entrepreneurial opportunity.											I	R	M
	182. Identify and analyze problems in the local community to determine opportunities that they provide for entrepreneurs.											I	R	M

Entrepreneurial Content Standards And Benchmarks

I - Introduce R - Reinforce M - Mastery

Content Standard	Benchmarks															
	183. Define opportunity cost and understand why every choice has a cost.											I	R	R	R	M
	184. Describe common economic choices and the opportunity costs involved.											I	R	R	R	M
	185. State the opportunity costs of the students' chosen business ideas.											I	R	R	R	M
	186. Identify steps in a given decision-making model.											I	R	R	R	M
	187. Demonstrate how entrepreneurs making rational choices can use the decision-making model.											I	R	R	R	M
	188. Define the four functional activities of business and provide examples of each.											I	R	R	R	M
4. All students will understand the effects that market forces have on entrepreneurs and their businesses.	189. Define the four factors of production and demonstrate how they can be combined to produce goods and services.											I	R	R	R	M
	190. Analyze mistakes made by entrepreneurs and determine possible means of correcting them.											I	R	R	R	M
	191. Relate the problems described in the reading to the problem of scarcity.											I	R	R	R	M
	192. Identify and define the types of economic systems.											I	R	R	R	M
	193. Identify the basic characteristics of our mixed-market economy.											I	R	R	R	M
	194. Compare and contrast the role of entrepreneurship in market and command economies.											I	R	R	R	M
	195. Describe the functioning of competitive markets, including the efficient allocation of resources, the production of goods and services society wants most and the reduction of transaction costs.											I	R	R	R	M
	196. Explain the relationship between entrepreneurship and the successful functioning of a market economy.											I	R	R	R	M
5. All students will review basic concepts of business forms and expound upon those concepts.	197. Define intrapreneurship and compare it to entrepreneurship.											I	R	R	R	M
	198. Interpret graphs and trends regarding entrepreneurial opportunities for individuals.											I	R	R	R	M
	199. Explore not-for-profit organizations.												I	R	R	M
	200. Identify sources of market information that are available												I	R	R	M

Entrepreneurial Content Standards And Benchmarks

I - Introduce R – Reinforce M – Mastery

Content Standard	Benchmarks															
	to entrepreneurs and learn the uses of such information.															
	201. Compare and contrast the three forms of business organizations.											I	R	R	M	
	202. Compare forms of business organizations to learn the process for deciding, which is most appropriate for a given situation.											I	R	R	M	
	203. Evaluate relative advantages of starting a new business, buying an existing business or purchasing a franchise.											I	R	R	M	
All students will understand the financial and operational requirements of entrepreneurship.	204. Identify possible sources of financing for entrepreneurs.											I	R	R	M	
	205. Analyze factors that influence the cost of financing.											I	R	R	R	M
	206. Evaluate alternative methods of financing and determine the best method for the students' chosen enterprises.											I	R	R	R	M
	207. Distinguish between fixed and variable costs.											I	R	R	M	
	208. Learn to predict changes in cost, and control cost.							I	R	R	R	R	R	R	M	
	209. Contrast marginal cost, marginal revenue & diminishing returns.							I	R	R	R	R	R	R	M	
	210. Identify the opportunity costs of various alternatives available to entrepreneurs for maintaining or improving cash flow.							I	R	R	R	R	R	R	M	
	211. Determine possible causes and consequences of specified cash flow problems.							I	R	R	R	R	R	R	M	
All students will learn methods of managing the factors of production.	212. Distinguish between consumer credit and commercial credit.											I	R	R	M	
	213. Compare and contrast the costs and benefits of various types of commercial and consumer credit practices.							I	R	R	R	R	R	R	M	
	214. Analyze data on the use of credit by an entrepreneurial enterprise and recommend actions to prevent business failure.											I	R	R	M	
	215. Distinguish between primary and derived demand and relate those concepts to circular flow.											I	R	R	M	
	216. Predict the number of employees necessary for a given business.							I	R	R	R	R	R	R	M	
	217. Describe the management functions of business and identify them in real-world applications.							I	R	R	R	R	R	R	M	

Entrepreneurial Content Standards And Benchmarks

I - Introduce R - Reinforce M - Mastery

Content Standard	Benchmarks															
28. All students will understand the marketing considerations of entrepreneurs.	218. Predict the effects of events in the product market on the ability to make purchases in the factor market.									I	R	R	R	R	R	M
	219. Define productivity and diminishing marginal productivity.										I	R	R	R	R	M
	220. Predict the effects of specified changes on productivity.									I	R	R	R	R	R	M
	221. Describe the costs associated with employee absenteeism, apathy and turnover.											I	R	R	R	M
	222. Identify different methods of solving human resource management problems.										I	R	R	R	R	M
	223. Compare the behavior of businesses within perfect competition markets to those in imperfect competition markets.												I	R	R	M
	224. Analyze the advantages and disadvantages of perfect and imperfect competition markets.												I	R	R	M
	225. Define and learn to determine market structure.												I	R	R	M
	29. All students will understand several external factors, which affect the entrepreneur and techniques for dealing with those factors.	226. Evaluate methods of product differentiation and determine the benefits yielded by each.											I	R	R	M
		227. Determine how specific management functions are applied in the innovative process.												I	R	R
228. Establish business objectives and determine methods of meeting those objectives.													I	R	R	M
229. Identify examples of government goods and services.													I	R	R	M
230. Describe methods the government uses to finance programs that provide government goods and services.													I	R	R	M
231. Determine the effect of government programs on entrepreneurs.														I	R	M
232. Identify and describe examples of federal, state and local government policies, including fiscal policies and tax incentives that influence entrepreneurs.														I	R	M
233. Evaluate specific government policies in terms of their															I	R

Entrepreneurial Content Standards And Benchmarks

I - Introduce R -- Reinforce M - Mastery

Content Standard	Benchmarks															
	costs and benefits for entrepreneurs and for the society as a whole.															
	234. Predict the effects of changes in government taxing or spending policies on entrepreneurial enterprises.											I	R	R	M	
	235. Define inflation, recession and business cycle.											I	R	R	M	
. All students will list the components of a business plan and understand how such a plan contributes to small business success.	236. Identify important economic indicators and the effects of changes of those indicators on specified businesses.											I	R	R	M	
	237. Analyze the effects of unemployment and inflation on entrepreneurs.											I	R	R	M	
	238. Analyze effects of recession and expansion on different sectors of the economy.											I	R	R	M	
. All students will identify the factors that should be considered determining the location of a business.	239. Identify the components of a business plan.									I	R	R	R	R	R	M
	240. Relate the significance of each of the components.											I	R	R	R	M
!. All students will develop a marketing strategy for a small business.	241. Complete a business plan worksheet.											I	R	R	R	M
	242. List the factors to be considered when selecting a specific site for a business.									I	R	R	R	R	R	M
	243. Relate the importance of these factors to the potential for success for the business.									I	R	R	R	R	R	M
	244. Define the key customer segments that the business is targeting.									I	R	R	R	R	R	M
	245. List the "four P's."											I	R	R	R	M
	246. Explain the importance of brand equity as it relates to the business.											I	R	R	R	M
	247. Compare and contrast pricing strategies.											I	R	R	R	M
	248. Explain the importance of creating and articulating a customer service policy.									I	R	R	R	R	R	M
	249. Discuss the advantages and disadvantages of different promotional venues.											I	R	R	R	M

Entrepreneurial Content Standards And Benchmarks

I - Introduce R - Reinforce M - Mastery

Content Standard	Benchmarks														
3. All students will develop a financial plan for a small business.	250. Develop an advertising and promotional plan for the business.											I	R	R	M
	251. List the distribution options available for the business.											I	R	R	M
	252. Choose and justify a means of distribution for the business.											I	R	R	M
	253. Define capital.											I	R	R	M
	254. Estimate the dollar amount needed to open a business.											I	R	R	M
4. All students will develop and implement a community service project.	255. Project monthly and annual business income for the first year of operation.											I	R	R	M
	256. Estimate annual and monthly cash flow for the first year of operation.											I	R	R	M
	257. Explain how financial ratio analysis can signal the health of a business.											I	R	R	M
5. All students will develop presentation, public speaking and general communication skills.	258. Identify service needs for community immediately surrounding business.											I	R	R	M
	259. Create a realistic implementation timetable and action plan for project.											I	R	R	M
6. All students will internalize information from practicum and mentor.	260. Work with area community service agencies (if necessary).											I	R	R	M
	261. Create presentation-outlining experiences for class discussion.											I	R	R	M
	262. Actively participate in on-going class discussions.										I	R	R	R	M
	263. Document experiences of the practice in an Entrepreneur's Journal.											I	R	R	M
	264. Exchange ideas regularly with mentor (including on-going correspondence).											I	R	R	M

Special Education Forms

(

o

o

THE INDIVIDUALIZED EDUCATIONAL PLANNING PROCESS

REFERRAL

When a student is suspected of having a disability, a written or verbal referral is submitted to the school district.

PARENT NOTIFICATION

A consent form and required information is given to the parent within 10, calendar days of receiving the referral.

PARENT CONSENT RECEIVED

Parent returns the consent form giving permission to evaluate the child.

MULTIDISCIPLINARY EVALUATION TEAM (MET)

The Multidisciplinary Evaluation Team (MET) completes a comprehensive evaluation. The Team develops a written report, which includes a recommendation of eligibility. A member of the team will share its findings at the initial IEPC and each IEPC following subsequent MET evaluations.

INDIVIDUALIZED EDUCATIONAL PLANNING COMMITTEE (IEPC) MEETING

The IEPC is convened within 30 school days of consent to evaluate. The parent is invited to attend at least 7 calendar days prior to the meeting. Eligibility is determined and an Individualized Education Plan (IEP) is developed.

PARENT NOTIFICATION

Written notice of intent to implement the IEP must be provided to the parent within 7 calendar days of the IEP.

IEPC IMPLEMENTED

The IEP is implemented (and written parental consent) within 15 school days of the written parent notice.

ANNUAL REVIEW

The IEPC is convened at least every 12 months to review and update the IEP.

THREE YEAR RE-EVALUATION

The MET completes a new comprehensive evaluation at least every 36 months to review eligibility.

STUDENT SCREENING REPORT

Name of Student _____ DOB _____ Student ID# _____

Date of Entry _____ Date of Screening _____ Teacher _____ Grade _____

1. Vision

Yes No

- Holds book too close or too far
- Squints or has trouble seeing board
- Has trouble with eyes
- Has weak note taking skills
- Other

2. Emotional Behaviors

Yes No

- Displays obsessive or compulsive behaviors
- Behaves impulsively
- Is withdrawn
- Other

3. Psychomotor Skills

Yes No

- Has short attention span
- Is clumsy or awkward
- Has poor coordination
- Other

4. Academic Progress

Yes No

- Learns very slowly
- Below grade level in reading
- Below grade level in math
- Does not remember concepts taught from day to day
- Other

5. Communication Skills

Yes NO

- Has poor speech habits
- Articulates poorly
- Often stutters
- Has difficulty expressing ideas
- Other

6. Hearing

Yes NO

- Does not respond name, directions, or questions in class
- Frequently asks for information to be repeated or asks "What"
- Has significantly delayed language
- Has frequent earaches
- Seems not to pay attention
- Other

Administrative Action

Yes No

- Referred for evaluation
- Made accommodations (list)

- Modified program (list)

- Other (list)

Comments: _____ Teacher's Signature _____

Building Administrators Signature _____

Please return this form to the Building Administrator by: _____

REFERRAL FOR EVALUATION

Referral Date: _____

Student Name: _____ DOB: _____

School: _____ Grade: _____

Language Proficiency of Student: _____ Student ID# _____

Parent/Guardian: _____ Home Phone: _____ Work: _____

Address: _____

Referred by: _____ Title: _____

Reason for Referral: _____

1. Check the specific areas of concern. Next to each of the concerns list information that will help the referral team.

___ Cognitive abilities (including academic test performance): _____

___ Reading (word attack, vocabulary, comprehension): _____

___ Written language (composition, spelling): _____

___ Mathematics (calculation, reasoning): _____

___ Oral language and speech (receptive/expressive, articulation): _____

___ Classroom performance (including grades): _____

___ Social behavior (specifying any behavior that impedes learning): _____

___ Physical/motor skills (note problems): _____

___ Hearing (note problems): _____

___ Vision (note problems): _____

___ Other: _____

2. Review the cumulative folder for relevant information: _____

__ Previous educational history: _____

__ Group achievement tests and scores: _____

__ Attendance records: _____

__ List of services/programs and modifications tried: _____

__ Developmental ages (walking, talking, etc.) _____

__ Vision screening date: _____ Results: Left: _____ Right: _____

__ Hearing screening date: _____ Results: Left: _____ Right: _____

__ Health/Medical status: _____

__ Hospitalization / Illness History: _____

__ Developmental ages (walking, talking, etc.) _____

__ Other educationally relevant medical information: _____

Referral Decision:

__ Conduct full and individual evaluation

__ Do not conduct evaluation

__ Consider other appropriate adaptations, services, or programs

Signature of Referral Team _____ Title _____ Date _____

• Use additional pages as needed.

PRIOR WRITTEN NOTICE

(34 CFR 300.504)

Student Name: _____ **Date:** _____

Agency: _____ **Date Prior Written Notice Sent/Given to Parents:** _____

- Proposes to initiate or change the areas as described below; or
- Refuses to initiate or change the areas as described below;

Description of the action proposed or refused relative to identification, evaluation/re-evaluation, review/revision of the Individualized Education Program (IEP), educational placement, or provision of a Free Appropriate Public Education (FAPE) by the agency: _____

Explanation of why the agency proposes' or refuses to take this action: _____

Description of any options the agency considered and the reasons why those options were rejected: _____

Description of each evaluation's procedure, test, record, or report the agency used/will use as a basis for the proposed or refused action: _____

Description of any other factors that are relevant to the agency's proposal or refusal: _____

Parents of a child with a disability have protection under the procedural safeguards:

- A copy of your procedural safeguards is attached to this notice (required for initial evaluation, re-evaluation, IEP meeting notification, and upon registration of a due process complaint at a minimum).
- A copy of a description of your procedural safeguards may be obtained by contacting the agency at, _____

PARENT CONSENT FOR EVALUATION

Student: _____ DOB: _____

1. Your informed consent is required before your child can be evaluated for special education.
2. If you return this form and give your consent, a team will evaluate your child. You will be a member of that team.
3. You and other members of the team will consider the results of the evaluation. The team will determine your child's eligibility and need for special education and related services.

I have been fully informed of all information relevant to the proposed evaluation and have had an opportunity to ask questions about the proposed evaluation. I have received a copy of the Procedural Safeguards Notice and Prior Written Notice.

Please sign the appropriate statement:

- I give permission for the evaluation of my child for special education. I understand that the information from the evaluation is confidential.

Parent Signature _____ Date _____

- I do not give permission for the evaluation of my child.

Parent Signature _____ Date _____

FEDERAL EVALUATION AND ELIGIBILITY REQUIREMENTS

An initial evaluation consists of procedures to determine whether a student has a disability and to determine the educational needs of the student. The LEA conducts a full and individual initial evaluation before the provision of special education and related services to a child with a disability.

Indicate "Y" for yes and "N" for no, as appropriate

Yes/NO	EVALUATION CRITERIA
	1. Written notice to the parent as indicated in 20 U.S.C. Section 1415 is provided.
	2. No single procedure is used as a sole criterion for determining eligibility of a child with a disability.
	3. A variety of assessment tools and strategies to gather relevant functional and developmental information are used.
	4. Assessment tools and strategies that provide relevant information to determine the educational needs of the student are used.
	5. Technically sound instruments that assess the contribution of cognitive, behavioral factors, physical, and developmental factors are used.
	6. Test are selected and administered to a student with impaired sensory, manual, or speaking skills so as to ensure that the test results accurately reflect the student's aptitude or achievement in whatever the test purports to measure, rather than the student's disability.
	7. Tests are provided and administered in the students native language or other mode of communication, unless it is clearly not feasible to do so.
	8. Tests are selected and administered so as not to discriminate on a racial or cultural basis.
	9. Tests given to a student have been validated for the specific purpose for which they are used.
	10. Tests are administered by trained and knowledgeable personnel.
	11. Tests are administered in accordance with any instructions provided by the producer of such tests.
	12. Information provided by the parent is included.
	13. Information related to enabling the student to be involved in a progress in the general curriculum is included.
	14. The student is assessed in all areas related to the suspected disability.
	15. The evaluation report is developed.
	16. The results of the evaluation are provided to the parent prior to eligibility determination.
DETERMINATION OF CATEGORY OF ELIGIBILITY	
	1. Upon completion of tests and other evaluation strategies, a team of professionals and the parent determine whether or not the student has a disability.
	2. The team determines whether or not the student needs special education and related services.
	3. Eligibility is documented and copies of the eligibility determination and evaluation report are provided to the parents.
	4. A student is not a child with a disability if the deciding facto is lack of instruction in reading, math, or limited English proficiency.

Sample IEP

Individualized Education Program

Student Name _____ Date of Meeting _____

Student Demographics

IEP Team Meeting Participants

Role	Name	Date
Student		
Parent/Guardian/Surrogate		
LEA Representatives		
Special Education Teacher		
Regular Education Teacher		
Individual to Interpret the results of the evaluation		
Agency Representative		
Interpreter		
	Language	

Present Levels of Educational Performance (PLEP)

Clearly, specify the student's current functional performance in the areas identified. Include a description of how the student's disability affects his/her involvement and progress in the general curriculum. For preschool children, consider how the disability affects the student's participation in appropriate activities.

	Areas to Consider (Check all that apply)
	<input type="checkbox"/> Adult Living
	<input type="checkbox"/> Behavior (Social and Emotional)
	<input type="checkbox"/> Cognition
	<input type="checkbox"/> Communication
	<input type="checkbox"/> Community Experiences
	<input type="checkbox"/> Comprehensive Health
	<input type="checkbox"/> Daily Living Skills
	<input type="checkbox"/> Employment
	<input type="checkbox"/> Language Arts
	<input type="checkbox"/> Mathematics
	<input type="checkbox"/> Motor Skills
	<input type="checkbox"/> Physical Education
	<input type="checkbox"/> Technology
	<input type="checkbox"/> Workplace Skills

Student Name: _____ IEP Date: _____

Present Levels of Educational Performance (PLEP), continued	
Consideration of Other Factors	
The need for assistive technology devices and services has been considered.	<input type="checkbox"/> Needed <input type="checkbox"/> Not Needed, See PLEP
The communication needs of the student have been considered.	<input type="checkbox"/> Needed <input type="checkbox"/> Not Needed, See PLEP
Transition service (school to adult life) needs of the student have been considered.	<input type="checkbox"/> Needed <input type="checkbox"/> Not Needed, See PLEP
For a student whose behavior impedes his/her learning, or that of others, positive behavioral interventions, strategies, and supports have been considered.	<input type="checkbox"/> Needed <input type="checkbox"/> Not Needed, See PLEP
For a student with Limited English Proficiency, the effect of his/her language needs on the content of the IEP have been considered.	<input type="checkbox"/> Student is not LEP <input type="checkbox"/> Not Needed <input type="checkbox"/> Needed, See PLEP
For a student who is Blind or Visually Impaired, an evaluation, the need for instruction, and the use of Braille have been considered.	<input type="checkbox"/> Student is not VI <input type="checkbox"/> Not Needed, See the Explanation Attached <input type="checkbox"/> Needed, See PLEP
For a student who is deaf or hard of hearing, his/her need for communicating with peers and professional personnel in his/her mode of communication have been considered.	<input type="checkbox"/> Student is not HI <input type="checkbox"/> Not Needed <input type="checkbox"/> Needed, See PLEP

Student Name: _____ IEP Date: _____

Measurable Annual Goal, Short Term Objectives, or Benchmarks		
Goals, objectives, and benchmarks must be related to meeting the student's needs to enable the student to be involved in and progress in the general curriculum and to meet other educational needs that result from the students disability. Number each objective or benchmark.		
This annual goal is targeted for ESY Yes No		
Measurable annual goal, including how the student's progress toward this annual goal will be measured.	Met	Not Met
Short Term Objectives or Benchmarks	Met	Not Met

Attach as many copies of this page as needed.

Student Name: _____ IEP Date: _____

Document the services the student needs to advance appropriately toward attaining the annual goals; to be involved and progress in the general curriculum and to participate in extracurricular and other nonacademic activities; and to be education with other children with and without disabilities.

Statement of Special Education Services to be Provided					
	Initiation Date	Frequency / Amount	End Date	Location	Provider's Agency/Position

Statement of Related Services to be Provided						
<input type="checkbox"/> Check if none are needed	Initiation Date	Frequency/ Amount	End Date	Location	Provider's Agency/Position	
Transportation						
Speech and Language Pathology						
Physical Therapy						
Occupational Therapy						
Counseling Services						

Supplementary Aids and Services to be Provided					
<input type="checkbox"/> Check if none are needed	Initiation Date	Frequency/ Amount	End Date	Location	Provider's Agency/Position

Student Name: _____ IEP Date: _____

Program Adaptations (Accommodations or Modifications)					
<input type="checkbox"/> Check if none are needed Indicate(*) those that will be used for standardized assessments	Initiation Date	Frequency / Amount	End Date	Location	Provider's Agency/Position

Program Supports for School Personnel					
<input type="checkbox"/> Check if none are needed	Initiation Date	Frequency/ Amount	End Date	Location	Provider's Agency/Position

Provide an explanation of the extent, if any, to which the student will NOT participate with non-disabled students in the general curriculum, extracurricular and nonacademic activities, and program options. If Necessary, attach an additional page.					
<input type="checkbox"/> Check if none are needed	Initiation Date	Frequency/ Amount	End Date	Location	Provider's Agency/Position

Extended School Year Services	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Inadequate data available. The IEP team will reconvene on _____ to review the need for ESY.	Explain: Clearly identify the annual goals targeted for ESY.

Student Name: _____ IEP Date: _____

How will the parents be regularly informed of their child's progress toward annual goals and the extent to which that progress is sufficient to enable the child to achieve goals by the end of the year?

Participation in State or District-selected Norm referenced Tests	
<input type="checkbox"/> Yes, the student will participate and no adaptations (accommodations or modifications) are needed.	
<input type="checkbox"/> Yes, the student will participate with adaptations (accommodations or modifications) as listed in the Program Adaptations section.	
<input type="checkbox"/> No, the student will not participate	Explain why each assessment is not appropriate
How will the student be assessed?	

Participation in State or District Criterion Referenced Tests	
<input type="checkbox"/> Yes, the student will participate and no adaptations (accommodations or modifications) are needed.	
<input type="checkbox"/> Yes, the student will participate with adaptations (accommodations or modifications) as listed in the Program Adaptations section.	
<input type="checkbox"/> No, the student will not participate	Explain why each assessment is not appropriate
How will the student be assessed?	

For Students in a Private Residential Facility	
<input type="checkbox"/> The Exit Criteria have been developed and are attached.	
<input type="checkbox"/> An Integration Plan has been developed and is attached.	
<input type="checkbox"/> Not applicable, the student is not placed in a private residential facility.	

This placement is as close as possible to the student's home and is based on the student's IEP
<input type="checkbox"/> Yes
<input type="checkbox"/> Parent(s) selected a charters school or another school under open enrollment.
<input type="checkbox"/> No, explain the arrangements made by the IEP team. _____

Consider any potential harmful effects of this placement for the child or on the quality of services that he or she needs.

Sample Transition Driven IEP

Individualized Education Program

Student Name _____ **Date of Meeting** _____

Student Demographics

IEP Team Meeting Participants

Role	Name	Date
Student	_____	_____
Parent/Guardian/Surrogate	_____	_____
LEA Representatives	_____	_____
Special Education Teacher	_____	_____
Regular Education Teacher	_____	_____
Individual to Interpret the results of the evaluation	_____	_____
Agency Representative	_____	_____
Interpreter	_____	_____
	Language	_____

Renewal Application 2016-17

Academy of Dover Charter School

Renewal Application

September 30, 2016



104 Saulsbury Rd.

Dover, DE 19904

Phone: (302) 674-0684

Fax: (302) 674-3894

www.aodcharter.org

Table of Contents

I. Overview		
1.1	Basic School Information	Page 4
1.2	Demographics and Enrollment	Page 4
II. Academic Framework		
2.1	Success of Academic Program	Page 5
2.2	Mission Accomplishments	Page 6
III. Organizational Framework		
3.1	Organizational Performance	Page 7
3.2	Compliance with State and Federal Requirements	Page 8
3.3	Protecting the Rights of At-Risk Students, Students with Disabilities, and English Language Learners	Page 9
3.4	Enrollment Stability and Student Attrition	Page 11
3.5	Governance and Reporting Requirements	Page 12
3.6	Closure Requirements	Page 13
IV. Financial Framework		
4.1	Financial Viability	Page 14
V. Five-Year Planning		
5.1	Projected Enrollment	Page 15
5.2	Five Year Plan	Page 15

Appendices

- Appendix A: Organizational Chart
- Appendix B: Final FY16 Revenue and Expenditure Report
- Appendix C: FY16 Audited Financial Statement
- Appendix D: Preliminary FY17 Budget
- Appendix E: Math Unit with Summative Assessment
- Appendix F: ELA Unit with Summative Assessment
- Appendix G: DE Science Coalition MOU
- Appendix H: DE School Success Framework
- Appendix I: State Assessment Data
- Appendix J: RTI Data
- Appendix K: Board Oversight Policy
- Appendix L: Board Training Certificates
- Appendix M: School Calendar
- Appendix N: DeSSA Test Security Plan
- Appendix O: RTI Handbook
- Appendix P: Special Education Policy
- Appendix Q: Special Education Compliance Monitoring Audit
- Appendix R: Corrective Action Plan FY13
- Appendix S: Evaluation Policy
- Appendix T: Financial Framework

I. Overview

1.1 Fill in the following chart with the school's basic information:

Basic Information	
Name of School	Academy of Dover Charter School
Year School Opened	2003
Current Enrollment	247
Approved Enrollment	300
School Address	104 Saulsbury Road Dover, DE 19904
District(s) of Residence	Capital
Website Address	www.aodcharter.org
Name of School Leader	Cheri Marshall
School Leader Email and	Cheri.marshall@aod.k12.de.us 302-674-0684
Name of Board President	Kimeu Boynton
Board President Email and	kwboynton@gmail.com

1.2 Fill in the following chart with the school's demographics at the time of submission (all information must be verifiable through state reporting tools):

CURRENT YEAR ENROLLMENT & DEMOGRAPHIC INFORMATION	
Total Enrollment	248
# of Students on Waiting List	0
Gender	
# Male	111
# Female	137
Ethnicity/Race	

# White	27
# Black	190
# Hispanic	20
# Asian	0
# Other	1
# Multiracial	10
Special Populations	
# Students with disabilities	17
# English Language Learners	18
# Low-Income	140

II. Academic Framework/Delaware Student Success Framework

2.1 Is the academic program a success?

- a) Discuss the school’s academic achievement results over the current charter term. How has the school performed with regard to student growth and proficiency measures over the current charter term? In the absence of expected achievement, identify changes to instructional practices that your school has implemented to improve the school’s academic performance and student outcomes.

The following narrative is based on performance data for the years 2011-12, 2012-13, 2013-14, and 2014-15. At the time that this application was written, the 2015-16 performance data was not available. Over our charter term, the student performance data was reflected in both the Academic Framework (years 2011-2014) as well as the Delaware School Success Framework (years 2015-2016). Based on the DSSF (*Appendix H*) AOD students performed significantly lower than the state average for both reading and math. As reflected in the Academic Framework, AOD made AYP from 2010 to 2014. At that time, the Academic Framework was changed to the DSSF. *Appendix I* shows AOD’s proficiency scores for ELA and Math over the last charter term.

Over the last five years AOD has worked extensively to address the challenges of sustaining instructional growth for our school. During this period of time, the basis for this foundation has been to align both our curriculum and instructional priorities to the Common Core Standards. Through this effort, AOD feels that moving forward it will increase student performance across all of its area sub groups as well as provide the necessary sustainability for its students to reach their instructional growth targets in the areas of Math and ELA for each academic school year.

Based on the school assessment data for the last five years, the number one priority for AOD will be to address the instructional needs in the area of Reading and Math. Since 2011, student growth performance in Math has fluctuated between slight improvements to significant regression in comparison to other subgroups within the frameworks. Therefore, increasing student growth in Math is a top priority. In the area of Reading, AOD was able to meet a number of performance criteria related to academic performance, however, the trends for Student Growth and the area of Growth to Proficiency have shown inconsistencies in student performance over the last three years. In order to meet the necessary instructional challenges to increase student growth performance for both ELA and Math, the school has put forth a number of significant changes in order to meet the demands of all of its students. Actions that have been taken to increase student performance include:

- During the 2014-15 school year, AOD created a position of Math Interventionist who works with Tier 3 RTI students to provide further focus on areas of need.
- In 2015, AOD implemented an afterschool Smarter Balanced Boot Camp for an eleven week period. During that first year of implementation, we had 60 students participate in the program. We anticipate this number to grow in the future.
- Schoolwide curriculum maps in all core subjects were created and staff worked to locate and fill in gaps. This led to extensive researching and the purchasing of a new Literacy Based Reading Wonders program for the 16-17 school year. All staff received training on this curriculum at the beginning of the school year.
- AOD is currently implementing the Scholastic Math Inventory (SMI) as a driving force for our Math RTI program. This is new for the 16-17 school year. All staff received training on SMI at the beginning of the school year.
- AOD teachers meet in bi-weekly grade level collaboration meetings with the school administration. During these meetings, the staff look at recent data, make decisions regarding the data, discuss effective instructional strategies, etc.

In addition to the required State testing AOD also utilizes a norm-referenced benchmark assessment, DIBELS Next, to monitor student's reading progress and growth from fall to spring. With the recent addition of a math RTI program during the 2014-15 school year, AOD began using Moby Math as a tool to monitor and track student progress. During the 2016-17 school year, AOD purchased the Scholastic Math Inventory as the benchmark assessment. *Appendix J* shows RTI data from the 2015-16 school year for both reading and math.

Moving forward in this process for next year, the staff at AOD feel that the initiatives that have been put into place will provide our students with the opportunity to not only obtain the target growth goals for the state assessments but to also sustain this effort year in and year out. AOD will continue to implement, evaluate, and make the necessary adjustments to this plan, based on the performance of our students.

2.2 Is the school meeting its mission?

- a) State the mission of the school as it appears in your charter application. How does your school measure and track mission accomplishment?

The mission of the Academy of Dover Charter School is to open portals of opportunity for children and adults in the community through excellence in public education.

During this renewal process we are requesting to change our mission statement to the following: “At the Academy of Dover Charter School each child is a valued and unique individual. The educational process is student centered and achieved by partnerships involving students, parents, and staff where each child embraces the love, joy, and value of education”.

Our Beliefs-

- Each child can develop the confidence, skills and interests to become lifelong learners.
- Education is student centered and provides each child with the opportunity to maximize his/her potential by being provided with quality instruction.
- We provide a school that is positive, safe, purposeful, and productive.

As the school’s mission is adjusted, it will continue to align with the focus on improved student learning, improved measures of school and student performance, and greater opportunities for public school choice in Delaware. Academy of Dover measures and tracks mission accomplishments by the following:

- Monitoring and tracking student performance across all content areas and customizing instruction based on the student’s needs.
- Collecting School Climate data from staff, students, and parents
- Establishing parental involvement and community partnerships through different organizations.
- Student attendance and attrition
- Discipline Referrals

III. Organizational Framework

3.1 Is the school organizationally sound?

- a) Discuss the school’s organizational performance over the current charter term. How has the school performed with regard to organizational measures over the current charter term? In the absence of expected achievement, identify changes to organizational practices that your school has implemented to improve the school’s organizational outcomes.

The following narrative is based on organizational data for the current charter term of 2011-2016. During the 2011-12 and 2012-13 school years, AOD received an overall rating of “Meets Standard”. However during the 2013-14 and 2014-15 school years, AOD received an overall rating of “Does Not Meet Standard”. Incidences that occurred during this time were made public with the release of the Auditor’s Report in June 2015. The findings in this report had a major impact in the school’s organizational compliance. AOD has worked hard to correct these requirements during the 2015-16 school year. The draft Organizational Framework for 2015-16 shows that AOD “Meets Standard” for 11 of the 12 measures. Measure 2 shows a “TBD” as it is pending the final Audit report for that year. The final Organizational Framework Report had not been received at the time of this submission.

The following section outlines changes that have been implemented as well as plans for continuing to meet these expectations.

During the 2014-15 school year, AOD underwent a leadership change. An interim Head of School was brought in while the Board of Directors conducted a Head of School Search with the help of the Delaware School Boards Association. A replacement was named in February 2015. Since then, the school has been working to correct the financial management and reporting requirements.

Financial Management and Oversight:

- AOD created a Board Oversight Compliance Committee which now holds four members. This committee meets quarterly to ensure all policies are being followed. (*Appendix K*)
- Internal Control policies have been created, approved and submitted to the Division of Accounting.

Governance and Reporting:

- During the 2015-16 school year, AOD was placed on Probation due to the findings in the Auditor's report. AOD Board members and CBOC members hold regular monthly meetings. Throughout the 2015-16 school year the school received website monitoring reports from the Charter School Office which showed the school was meeting compliance in reporting requirements.
- Board and CBOC members received training through PIC, DANA, and Board Finance training through the Department of Education during the 15-16 school year. (*Appendix L*)

Students and Employees:

- During the 2014-15 school year, AOD had only 93.5% of teachers meet the Highly Qualified requirement. AOD made staffing changes and all teachers followed proper procedures to meet this requirement, such as taking the HQT survey or taking the necessary Praxis 2 exam. All novice teachers participate in the 3 year New Teacher Mentoring Program. During the 2015-16 school year, this percentage increased to 100% HQT.

These changes will ensure compliance of the school's operation moving forward. Over the past couple years, AOD has gone through many challenges and hurdles, especially in dealing with a financial mismanagement and all the problems that arose from that. However, the school will continue to strengthen each and every year moving forward.

3.2 Is the school implementing the essential terms of the charter's educational program as defined in the current charter, and complying with applicable state and federal requirements?

a) Provide specific examples of how your educational program is in compliance with instructional days/minutes requirements, the use of state assessments, Delaware content standards requirements, and providing an education and accommodations for at-risk students.

- Students at Academy of Dover attend school for 200 days and 7.5 hours per day. The instructional day begins at 8:15 and ends at 3:30. (*Appendix M*)
- Each year students at AOD participated in the state assessment (DCAS and SBAC). The testing coordinators and test administrators abide to the security policies as required by the State. The school submits the DeSSA Test Security Plan (*Appendix N*) and ensures that all staff complete the assessment security form.
- All K-5 curriculum and assessments are aligned to the Common Core Standards. Teachers received training on the Next Generation Science Standards

- AOD has complied with all State and Federal statues and requirements with regard to the education and accommodations for at-risk students. Compliance has been monitored through DOE site visits and desk audits.
- b) As appendices, provide the following documents as evidence of curriculum alignment to the Common Core State Standards and the Next Generation Science Standards:
 - Math Unit with Summative Assessment (Appendix E)
 - ELA Unit with Summative Assessment (Appendix F)
 - Science Coalition MOU (Appendix G)

3.3 Is the school protecting the rights of at-risk students, students with disabilities, and English Language Learners?

- a) Describe the process by which at-risk students are identified and evidence that the school is effective in providing the right resources and services for these students.

Academy of Dover Charter School adheres to Title 14 DE Administrative Code Section 12: Response to Intervention Procedures, Subsection 12.1.0 through 12.11.0 each public agency shall establish and implement procedures to determine whether a child responds to scientific, research based interventions for reading and mathematics.

Currently, AOD students are assessed three times per year with DIBELS Next for reading and Scholastic Math Inventory (SMI) for math. The data from those assessments are carefully analyzed for evidence to determine which students are at risk. Those students are then placed into RTI groups. Teacher input is an important part of the grouping process. The lowest performing students, which are considered Intensive, are placed in groups with our specialists. The next group, which is considered Strategic, are placed in groups with classroom teachers. Paraprofessionals are given Tier 1 students who have weaknesses that need to be addressed through differentiated instruction to prevent those students from dropping below the benchmark standards. Students who are at risk are progress monitored weekly to keep a careful watch on their growth toward benchmark goals. After each benchmark assessment, results are analyzed and new groups are created. (*Appendix O*)

- b) Describe the process by which students with disabilities are identified and evidence that the school is effective in providing the right resources and services for these students.

Academy of Dover Charter School adheres to Title 14 DE Administrative Code Section 900: Special Populations, Subsection 922.1.0 through 929.3.0 when identifying, evaluating, servicing, and monitoring a student suspected of having a disability. A “Child with a Disability” means a child evaluated in accordance with 14 DE Admin. Code 925.4.0 through 925.12.0 as having intellectual disability, a hearing impairment (including deafness), a speech or language impairment, a visual impairment (including blindness), a serious emotional disturbance, an orthopedic impairment, autism, traumatic brain injury, and other health impairment, a specific learning disability, deaf-blindness, or multiple disabilities, and who, by reason thereof, needs special education and related services.

Each year, as a universal screener, all students take the DIBELS Next benchmark assessment and starting in the 2016-17 school year, AOD has adopted Scholastic Math Inventory. If a student falls below the 50th percentile rank in either subject, the student is then referred to the RTI and

Instructional Support teams (IST). The team reviews data and creates a plan to assist the student in their area of concern. After 12 weeks and the team determines the student is not progressing, the student may be referred to the Special Education team for an evaluation. Once official consent is obtained from the parents, the testing is conducted by a school psychologist. Once testing is completed, the IEP team, which includes the parents, will meet to determine eligibility. The team will decide eligibility and an IEP will be created and implemented. (*Appendix P*)

- c) Describe the process by which students English language learners are identified and evidence that the school is effective in providing the right resources and services for these students.

Academy of Dover Charter School adheres to Title 14 DE Administrative Code Section 920: Educational Programs for English Language Learners, Subsection 1.0.0-8.0.0. The regulation shall apply to any district or charter school applying for or receiving funds to provide services or programs for English Language Learners (ELL). As part of the application process at Academy of Dover, all families are given the Home Language Survey. If a language other than English is listed on the application, the student is given the WIDA ACCESS Placement Test (W-APT) within twenty five days of enrollment. Any K-5 student that scores below a 5.0 on the W-APT will receive ELL support. Each spring, all ELL students are given the ACCESS test to determine their eligibility to continue receiving ELL services.

- d) Provide a summary of findings from any audits, investigations, or other administrative proceedings related to at-risk students, students with disabilities, or English Language Learners. Describe how the school developed and implemented a corrective action plan in response to audit findings (If applicable, evidence may be attached as clearly-labeled documents in the Appendix.)

Under the IDEA, the Department is required to review the data of local education agencies (LEA's) relating to targets identified in the State's Performance Plan and to make annual determinations on LEA performance. During the Fiscal Years 2011 and 2012, AOD "met requirements" under the IDEA. (*Appendix Q*)

Annual Determination for 2013-2014

During the 2015-16 school year, AOD received the annual determination letter from 2013-14 and was placed on *Needs Assistance*. A corrective action plan was put in place and the school completed the appropriate action targets. The final update was submitted on June 30, 2016 (*Appendix R*).

Annual Determination for 2014-2015

Academy of Dover received a rating of 71% on the 2014-2015 Annual Determination report. Currently, Academy of Dover is working on a corrective action plan for fiscal year 2014 for indicator 3C: Performance Rate for Math and ELA. The corrective action plan is due October 14, 2016.

3.4 Is the school monitoring and minimizing attrition rates and maintaining enrollment stability?

a). Fill in the following chart with the appropriate enrollment information over the last 4 years (3 years if this is the school’s first renewal):

School Enrollment Trends									
	2013-2014		2014-2015		2015-2016		2016-2017		
	Approved Enrollment	Sept 30 Enrollment Count	Approved Enrollment	Sept 30 Enrollment Count	Approved Enrollment	Sept 30 Enrollment Count	Approved Enrollment	Sept 30 Enrollment Count	Current Waitlist for the 2016-2017 school year
K	60	70	60	62	60	55	60	39	0
Grade 1	60	70	60	52	60	56	60	47	0
Grade 2	60	59	60	59	60	47	60	46	0
Grade 3	45	44	45	49	45	50	45	39	0
Grade 4	45	43	45	37	45	39	45	43	0
Grade 5	30	22	30	31	30	37	30	33	0
Total	300	308	300	290	300	284	300	247	0

- b) How does the school both monitor and plan to minimize attrition rates? (*Attrition rate is calculated by the number of students leaving the school during the school year over number of students enrolled in the school on September 30.*) Provide a summary of why students left your school.

Academy of Dover monitors attendance daily through E-School. Policies are put in place to address excessive tardiness and absences. AOD receives immediate notice of student withdrawals and requests the reason for withdrawal on our student withdrawal form. Over the last four years, we have seen that a majority of our attrition was due to family logistics and/or transportation issues. The information in the chart shows the amount of students that left the school for the last four years.

School Year	Moved out of area/state	Enrolled in K-8 Charter	Enrolled in Local districts	Total Attrition
2016-17	4%	5%	14%	23%
2015-16	8%	3%	13%	24%
2014-15	11%	3%	18%	32%
2013-14	7%	3%	15%	25%

In looking at the chart, there is a trend with about 25% of students leaving AOD each year. During the 14-15 school year, we saw a jump in attrition based on the uncertainty of the financial issues the school was under. AOD has recently formed a recruiting committee that works on coming up with ideas and finding events in the community to recruit more students. Each spring, AOD invites the local Head Starts for a tour of the school and activities with the kindergarten classes. The school is also working with different churches within the community, and setting up booths at local stores in an effort to recruit more students. The school will continue to work to attract students and families to AOD.

3.5 Is the school complying with governance and reporting requirements?

- a) Provide information regarding how the Board of Trustees effectively evaluates the School Leader(s), including any policies or procedures related to such evaluation(s).

The Board of Directors evaluates the Head of School on an annual basis using DPAS II. The Board President completed DPAS II training for administrators during the 2015-2016 school year. The Head of School evaluation is completed by the Board President and two other Board members. The Head of School is responsible for evaluating all other staff within the building. (*Appendix S*)

- b) Provide information regarding how the Board of Trustees effectively evaluates its own success. Include examples of any corrective actions, if applicable, the Board of Trustees implemented as a result of its evaluation.

The Board of Trustees of the Academy of Dover ensures by rigorous adherence to budgetary constraints in meeting our financial obligations. This is accomplished by very detailed monthly financial reporting and in depth discussion at each monthly board meeting. Moreover, the Board of Trustees engages in active problem solving with the Head of School and personnel who represent teachers and staff, who act as liaisons between the Board and employees. These liaisons are full voting members and therefore have direct input and impact on decision making by the Board of Trustees. This form of governance also encourages rapid identification of problems and challenges, as well as, practical development of alternative actions.

- c) Identify the school’s plan to ensure the effectiveness of its Board of Trustees, including governance training and new member induction.

Board minutes reflect the diversity and sense of unity in the discussions and deliberations. Corrective actions are, as a result, practical and effective due to the variety of skills and experience available. Finally, members of the Board of Trustees attend training offered by both the Department of Education but also by the statewide organizations and personnel who offer specific issue related instruction. In August 2015, the Board of Trustees participated in “Mapping Board Excellence” training provided by DANA. Members of the Board conducted a self-assessment and a report was generated with results and recommendations in which the Board could improve. During the 2016-17 school year board members are required to take a Fraud Prevention training. New members are welcomed and are easily made to feel quickly at ease in this culture of collaboration and information sharing. All members are encouraged to be goal directed to enable the blending of different perspectives to achieve the most desirable outcomes.

- d) Describe the school’s process for succession planning including identification, development and retention of school leaders.

In 2014-15 the Board of Directors conducted a search for a new Head of School. The school Board worked in collaboration with the Delaware School Boards Association in order to find a qualified candidate. The position was posted on Join Delaware Schools and advertised in the State’s newspaper for a number of weeks. AOD’s organizational chart (*Appendix A*) shows the hierarchy of leadership in the school.

3.6 Is the school complying with closure requirements?

- a) Describe the school’s plan for procedures it will follow in the event of the closure or dissolution of the school. The plan should, at a minimum, address each of the following areas:

- Current balance of contingency reserve funds to be used to cover accrued expenses including summer pay obligations (identify estimated amount for the 2016-17 school year), final audit (identify estimated cost), and other expenses typically incurred by June but paid in July or thereafter.
- If the current contingency reserve balance is insufficient to cover the estimated costs identified above, discuss the school’s plan for ensuring the required funds are set aside, including the timeframe for meeting this requirement.
- Identification of the individuals responsible for handling the school’s final closeout activities after closure or dissolution (i.e., who will process any final payments, coordinate the final audit, etc.).

AOD has used all of its reserve funds to balance the budget for fiscal year 2017. Our reserve funds have been depleted over the last several years for many reasons. First, the Mosaica legal issue which was dormant for many years became a difficult problem at the end of Fiscal year 15. Mosaica was awarded an original judgement by an arbitrator and confirmed by the Court of Chancery in the amount of \$962,724.68. This original amount had increased over the years to \$2,019,956.30 which included interest, cost and fees. AOD settled this issue on June 2, 2015. Mosaica agreed to accept \$650,000.00 as full satisfaction to the debt. AOD paid \$350,000.00

from local reserves towards this obligation in June 2015, another \$150,000.00 in July 2015, and \$50,000.00 in July 2016. There are two additional payments of \$50,000.00 due in July 2017 and July 2018. Second, the financial mismanagement by the former Head of School resulted in a loss of funds. Third, the enrollment at AOD has decreased over the past few years for various reasons which had an adverse effect on our local fund balance. The exact cost for summer obligations for the 2016-17 school year can only be estimated based on the finances for the 2015-16 school year which were \$308,930.73. The estimated cost for the final audit would be approximately \$29,850.00.

Since the current budget for the 2016-17 school year proposes using all our reserves for the current school year, there would be limited, if any, funds available at the end of the current school year to cover these expenses. It is impossible to provide an exact time frame for meeting this requirement. It is our plan to increase enrollment each year until the reserve funds are adequate to meet our summer obligations.

In the event of closure, AOD will follow the charter school closure guidelines. This process will be administered by the Board of Directors and school principal. The final audit will be coordinated by the school principal, secretary, and consultant from Innovative Schools.

IV. Financial Framework

4.1 Is the school financially viable?

- a) Discuss the results of your Financial Performance Reports over the current charter term. Discuss any trends and provide explanations for each individual measure for which you received a “Does Not Meet Standard” or “Falls Far Below Standard” rating, including your plans and strategies for improving the individual measures and, if applicable, overall ratings.

The 2015-16 financial report (*Appendix T*) indicates only one category for which AOD “Falls far below standard” which is Measure 2c Cash Flow. Our cash flow has been negatively affected by the payments to Mosaica to settle the legal issue. Without these payments to Mosaica our cash flow should have met the standard. The only way to meet the standard in this category is to increase our student enrollment for future years so that our reserve funds are replenished. There have been some categories in the past in which we did not meet standard or in which we fell far below standard, but those categories were resolved as evidenced in the latest report. The settlement of the Mosaica issue with the payment of \$550,000.00 from our reserves to reduce our current total loan obligations to \$100,000.00 certainly assisted in improving our rating in the Debt to Asset Ratio classification.

- b) Provide a summary of findings from independent audits and, where applicable, how the school developed and implemented a corrective action plan in response to audit findings (If applicable, evidence may be attached as clearly labeled documents in the Appendix.)

The fiscal year 2016 audited financial statement was prepared by the auditors and approved by AOD’s Board of Directors. The report contains information on the prior year findings. The school has developed policies based on the recommendations of the auditors and as a result of these policy changes, all prior year findings have been resolved. The 2016 report states there were no current year findings or recommendations. See Appendix C.

- c) As appendices, please provide the following documents:
- Final Fiscal Year 2016 Revenue & Expenditure Budget Report in the prescribed Department format (*Appendix B*)
 - Approved preliminary Fiscal Year 2017 Budget in the prescribed Department format (*Appendix D*)
 - Fiscal Year 2016 Audited Financial Statements (*Appendix C*)

V. Five-Year Planning

5.1 Projected Enrollment

- a) Provide a five-year enrollment chart by grade level, in the prescribed format below. Ensure that the chart allows for the natural progression of students from year-to-year.

Projected Enrollment					
	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
K	39	60	60	60	60
Grade 1	47	50	55	55	55
Grade 2	46	50	50	50	50
Grade 3	39	45	50	50	50
Grade 4	43	45	45	45	45
Grade 5	33	37	38	38	38
TOTAL*	247	287	298	298	298

5.2 What are the school's plans for the next five years of the charter?

- a) Describe what changes and improvements the school will undertake in the next five years in **all** core content areas based on the school's examination of student performance outcomes.

Academy of Dover’s 5 year school improvement plan reflects minor changes that would help prepare our students with the early foundation necessary to excel academically and socially in any future endeavor.

Curriculum Changes- AOD would like to transition from DIBELS to the Scholastic Reading Inventory (SRI). During the 16-17 school year SMI was added as the diagnostic assessment for math. We are hoping to make this transition for the following school year.

Science- AOD participates in the Science Coalition and all K-5 teachers are trained in science kits. While the state works to incorporate the Next Generation Science Standards (NGSS) into the kits, the school continues to send all new teachers to trainings. During the 15-16 school year, teachers were trained in the NGSS through the Southern DE Professional Development Center. The school plans to conduct NGSS training to all new teachers for the 16-7 school year.

Technology- With the growing demands for technology and a student body that is technologically

savvy, AOD would like to gradually upgrade the technology in the building. Each classroom is equipped with 8 student computers and a teacher laptop. Several of our computers are becoming outdated (5 years old) and will need to be replaced. The technology lab houses 27 student computers that are also 5 years old. We would like to gradually update those computers. During the 2014-15 school year, AOD purchased brand new Smart Boards for all the classrooms. The use of document cameras would be a great addition to use in conjunction with the Smart Boards. Teachers would be able to project manipulatives and use them to model math problems. We hope to purchase one per classroom, starting with kindergarten and first grade, and adding more each year so that each classroom is equipped with a document camera.

- b) Provide goals and performance outcomes, including assessment tools and measures to be used. Provide a rationale for the identified goals and assessment measures. Provide any mission-specific goals that you will include in your Performance Agreement.

Goal #1: To be at or above the State average for proficiency in ELA, Math, Science, and Social Studies.

- Primary assessment tool: Smarter Balanced/DCAS
- Rationale: According to the Performance Framework guidelines, schools receive a “Meets Standard” if their average proficiency rate on state assessments in Reading and Math meets or exceeds the statewide average student performance of schools serving the same grades.

Goal #2: To show growth in the Scholastic Math Inventory (SMI) and DIBELS Next from beginning of year to the end of year.

- Primary assessment tool: SMI, DIBELS Next
- Rationale: Not only do we want to show growth on the state assessments, but also with our internal assessments. Students will take the SMI and DIBELS assessments 3 times per year to determine what level of interventions they need. This will allow teachers to focus on individual student needs and work to address these needs during RTI and small group instruction.

Goal #3: To demonstrate growth in Reading and Math among subgroups, such as special education.

- Primary assessment tool: Smarter Balanced/DCAS/SMI/DIBELS
- Rationale: During 2015-16, AOD’s African American students scored higher in Reading and Math than the state average for grades third through fifth. We want this trend to continue among other subgroups. Special education students continues to be lower than the state average with the exception of 2015-16 where special education students scored above the state average in Math.

- c) Provide detailed information on the school's plan for any changes or improvements to its facility for the five years of the next charter renewal term. The plan should include an adequate and detailed financial arrangement and timeline for the proposed facility improvements.

AOD intends to remain at its current location at 104 Saulsbury Road. AOD currently rents the building, which is 14 years old. The landlord will continue to make repairs and upgrades per the lease agreement. Our educational program will continue to serve students in grades K-5.

Additional Information:

During this renewal process, AOD is requesting a decrease in the number of instructional days. The request is that we reduce our school year from 200 instructional days to 180, starting in the 2017-18 school year.

- Rationale #1: A 200 day school year only allows students to have a 5 to 6 week summer break with their families. In 2016, students began on August 10th and will go until June 16th. Part of the problem with starting early is that other schools in our area do not start until the end of August. Many families have older siblings that attend other schools and don't start until 2 weeks after AOD. This puts a strain on families. Often we have found that some students don't start until districts do, which puts them already 2 weeks behind in curriculum and early assessments.
- Rationale #2: The 5 week break in the summer provides for a very tight timeframe to implement changes for the upcoming school year. For example, the State shuts down for 2 to 3 weeks in order to prepare for a new fiscal year. This means schools cannot spend money or make payments during this time. This puts a huge strain on ordering curriculum materials and planning for new implementations for that school year. With teachers returning the first week in August, we often do not have new curriculum materials in time for trainings or for the first weeks of school. This year our teachers returned on August 4th.
- Rationale #3: Staff hired during the summer time have to wait 4 to 6 weeks before receiving their first paycheck. Summer pay typically goes until the first week in September and our teachers are already 1 month into the school year at that time.
- Rationale #4: The administration feel it is important for staff and students to receive adequate time off during the summer. Therefore, our school calendar does not allow for In-service days throughout the school year, in an effort to ensure that school gets out before July and meets the 200 day policy. AOD provides one half day per month for afternoon professional development, which is often hard for outside trainers.
- Rationale #5: During the summer months, the state often holds trainings for administration and teachers. This conflicts with us because we are back in session and teachers prefer not to miss any time during the first few weeks so that they can get their classes in order.

Renewal Report - April 30, 2021



Delaware Department of
Education
2021-2022 Renewal Report
Academy of Dover
April 30, 2021

Table of Contents

Charter School Renewal Report

I. Overview

II. Academic Performance

III. Organizational Framework

IV. Financial Framework

Attachments

Attachments:

- i. 2017-2018 Annual Report
- ii. 2018-2019 Annual Report
- iii. 2019-2020 Annual Report
- iv. 2017-2018 Academic Performance Report
- v. 2018-2019 Academic Performance Report
- vi. 2019-2020 Academic Performance Report
- vii. 2017-2018 Financial Performance Report
- viii. 2018-2019 Financial Performance Report
- ix. 2019-2020 Financial Performance Report
- x. 2017-2018 Organizational Performance Report
- xi. 2018-2019 Organizational Performance Report
- xii. 2019-2020 Organizational Performance Report

Charter School Renewal Report

Requirements Under the Law

The charter school law (14 *Del. C.* § 514A) outlines the provisions that the Delaware Department of Education (DDOE) follows for charter renewal and nonrenewal. The DDOE is required to review the preliminary performance of the charter school to determine its compliance with its charter and its satisfaction of the criteria set forth in this title for the purposes of renewal or nonrenewal¹. 14 *Del. C.* § 514A (c) states that,

(c) No later than April 30, the approving authority shall issue a charter school renewal report and charter renewal application guidance to any charter school whose charter will expire the following year. The renewal report shall summarize the charter school's performance record to date, based on the data required by 79 *Del. Laws*, c. 51 and the charter contract, and shall provide notice of any weaknesses or concerns perceived by the approving authority concerning the charter school that may jeopardize its position in seeking renewal if not timely rectified. The charter school shall have 10 working days to respond to the renewal report and submit any corrections or clarifications for the report.

I. OVERVIEW

1.1 Basic Information

Review the following chart with the school’s basic information:

BASIC INFORMATION	
Name of School	Academy of Dover
Year School Opened	2003
Enrollment 2020-2021 ²	329
Approved Enrollment	327 (SY 2020-21)
School Address	104 Saulsbury Road, Dover, DE 19904
District(s) of Residence	Capital School District
Website Address	http://www.aodcharter.org/
Name of School Leader	Michele Marinucci
School Leader Email and Phone Number	Michele.Marinucci@aod.k12.de.us (302) 674-0684
Name of Board President	Kimeu Boynton
Board President Email	kwboynton@gmail.com
<p>Mission Statement: At the Academy of Dover Charter School each child is a valued and unique individual. The educational process is student centered and achieved by partnerships involving students, parents, and staff where each child embraces the love, joy, and value of education.</p> <p>Our Beliefs-</p> <ul style="list-style-type: none"> • Each child can develop the confidence, skills and interests to become lifelong learners. • Education is student centered and provides each child with the opportunity to maximize his/her potential by being provided with quality instruction. • We provide a school that is positive, safe, purposeful, and productive. 	

1.2 School Demographic Data:

Review the following chart with the school's demographics at the time of submission (all information must be verifiable through state reporting tools):

ENROLLMENT & DEMOGRAPHIC INFORMATION				
	2017-2018	2018-2019	2019-2020	2020-2021
Total Enrollment	270	272	266	329
Gender				
% Male	44.07%	49.26%	51.50%	53.19%
% Female	55.93%	50.74%	48.50%	46.81%
Ethnicity/Race				
% African American	72.96%	75.00%	77.82%	75.08%
% American Indian	0%	0%	0%	.30%
% Asian	0%	0%	0%	0
% Hispanic/Latino	13.33%	12.87%	11.65%	10.03%
% White	10.00%	8.82%	6.39%	11.85%
% Multiracial	2.96%	2.21%	3.01%	2.74%
Special Populations				
% Special Education	7.41%	5.88%	10.15%	12.77%
% English Language Learners	11.48%	11.40%	10.15%	8.51%
% Low-Income	69.63%	62.87%	56.39%	52.28%

School Comments 2019-2020	The school was not required to provide a response to this information.
School Comments 2018-2019	The school was not required to provide a response to this information.
School Comments 2017-2018	The school was not required to provide a response to this information.

The table lists any approved minor and/or major modifications over the course of the school's current charter term.

Date	Modification Requested	Outcome
4/15/21	Enrollment increase of greater than 15% Grade configuration (added grades 7 and 8)	Approved
2/27/20	Increase the grade configuration from K-5 to K-6 and increase enrollment to 330 students.	Approved

1.4 Enrollment Trends

Review the following chart with the school's enrollment data.

School Enrollment Trends								
<i>Cells highlighted in gray were grade levels not serviced by this school.</i>								
	2017-2018		2018-2019		2019-2020		2020-2021	
	Approved Enrollment	30-Sep Enrollment Count	Approved Enrollment	30-Sep Enrollment Count	Approved Enrollment	30-Sep Enrollment Count	Approved Enrollment	30-Sep Enrollment Count
K	60	62	60	47	60	45	58	58
Grade 1	50	33	55	60	55	47	52	53
Grade 2	50	49	50	34	50	56	54	54
Grade 3	45	45	50	44	50	30	56	57
Grade 4	45	34	45	44	45	43	24	24
Grade 5	37	47	40	43	38	45	48	48
Grade 6							35	35
Grade 7								
Grade 8								
Total	287	270	300	272	298	266	327	329

DOE Summary:
Academy of Dover's enrollment has trended below its approved enrollment for the first three years of its current charter term, at 94%, 91%, and 89%, respectively. However, in school year 20/21, its enrollment improved to 101% of its approved enrollment.

School Comments 2019-2020	The school was not required to provide a response to this information.
School Comments 2018-2019	Describe the school's plans to monitor and minimize attrition rates. Provide information about why students are choosing to enroll in different schools. The Academy of Dover monitors attendance daily through eSchool. Policies are in place to address excessive tardiness and absences. The Academy receives immediate notification of withdrawals and requests the reason for the withdrawal as well as a conference with the parents/guardians. Through this process initiated in fall 2019,

	we have been able to retain some students who were going to withdraw. Students who have withdrawn have done so due to family relocation, sibling's graduation.
School Comments 2017-2018	The school was not required to provide a response to this information.

1.5 Reenrollment Trends

Review the following chart with the school's reenrollment data. The reenrollment rate³ is the % of students continuously enrolled in the school from one year to the next.

School Reenrollment Trends								
	2017-2018		2018-2019		2019-2020		2020-2021	
	Number of Students Reenrolled Count	Percentage of Students Reenrolled %	Number of Students Reenrolled Count	Percentage of Students Reenrolled %	Number of Students Reenrolled Count	Percentage of Students Reenrolled %	Number of Students Reenrolled Count	Percentage of Students Reenrolled %
K	1		1		1		1	
Grade 1	22	56.41%	48	77.42%	37	78.72%	39	86.67
Grade 2	37	78.72%	26	g78.79%	49	81.67%	43	91.49
Grade 3	34	72.34%	33	67.35%	26	76.47%	52	92.86
Grade 4	22	56.41%	38	84.44%	36	81.82%	19	63.33
Grade 5	36	85.71%	27	79.41%	35	79.55%	40	93.02
Grade 6							33	73.33
Grade 7								
Grade 8								
Total Total/Avg	152	71.03%	173	77.58%	184	80.35%	227	85.34%

** School entry grade level. Reenrollment data not collected for this grade level.

DOE Summary:
Academy of Dover's reenrollment rate has increased steadily over the course of its current charter term from 71.03% to 84.34%.

School Comments 2019-2020	The Academy of Dover monitors attendance daily through eSchool. Policies are in place to address excessive tardiness and absences. The Academy receives immediate notification of withdrawals. Requests are made to conference with parents and guardians to understand the reason for withdrawal. Typical reason for withdraw is family relocation. The Academy had a very high retention rate of returning students. Families
--------------------------------------	---

	<p>have indicated their satisfaction of adding the 6th grade and would like to see the Academy add 7th and 8th grades as well.</p>
<p>School Comments 2018-2019</p>	<p>The Academy of Dover monitors attendance daily through eSchool. Policies are in place to address excessive tardiness and absences. The Academy receives immediate notification of withdrawals and requests the reason for the withdrawal as well as a conference with the parents/guardians. Through this process initiated in fall 2019, we have been able to retain some students who were going to withdraw. Students who have withdrawn have done so due to family relocation, sibling’s graduation, or transportation issues. Many families have indicated that they are seeking to continue their children’s education within the charter school setting after the 5th grade, causing them to enroll their children in other charter schools that offer higher grades. We have ongoing recruitment efforts and have been engaging social media as well as direct word of mouth campaigns to continue spreading the word to all interested in hearing about our Amazing Academy.</p>

<p>School Comments 2017-2018</p>	<p>Academy of Dover monitors attendance daily through E-School. Policies are put in place to address excessive tardiness and absences. AOD receives immediate notice of student withdrawals and requests the reason for withdrawal on our student withdrawal form. AOD students typically leave due to family re-location, siblings graduating the 5th grade, or transportation issues. Our retention rates are higher among the 4th graders entering 5th grade. Feedback from families indicates that they are looking for alternative placements outside of their home district. Another reason for families leaving is that they get accepted into other charter schools in the area that go from KN to 8th grade. This ensures that the students can remain at one school for a longer period of time. AOD has discussed possibilities of expanding to middle school, however our building is maximized, as far as space. Recruitment committees work within the community to recruit more students for the following school year. With the help of the committee, more students were enrolled for the 2017-18 school year.</p>
---	---

II. Academic Performance

Changes in the Academic Framework

From School Year (SY) 2014-15 through SY 2017-18, the academic performance of all charter schools was evaluated using the Delaware School Success Framework that were publishing annually. In December 2015, Congress reauthorized the Elementary and Secondary Education Act, the main federal law governing public education. The Every Student Succeeds Act (ESSA) replaced the No Child Left Behind Act (NCLB). ESSA implementation began in 2017-18 school year.

2.1 Delaware School Success Framework

Overall Academic Ratings

Elementary (grades K-5)/Middle School (grades 6-8)

Indicator	2017-2018			2018-2019			2019-2020		
	Points	Points Earned	Percent Points	Points	Points Earned	Percent Points	Points	Points Earned	Percent Points
Academic Achievement	150.00	68.00	45% Approaching Expectations	150.00	51.00	34% Approaching Expectations	Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.		
Academic Progress	200.00	120.00	60% Approaching Expectations	200.00	112.00	56% Meets Expectations			
School Quality/Student Success	50.00	47.00	94% Exceeds Expectations	50.00	45.00	90% Exceeds Expectations			
Progress Toward English Language Proficiency	50	38.00	76% Meets Expectations	50	33.00	66% Approaching Expectations			
Overall	450.00	273.00	61% Approaching Expectations	450.00	241.00	54% Approaching Expectations			

a) Based on the table above discuss the school's:

- overall academic achievement results,
- major challenges,
- and accomplishments

DOE Summary:

Starting in SY 17/18, with the implementation of ESSA, each school received an overall rating on the DSSF in addition to ratings for each indicator. AOD earned an "Approaching Expectations" rating in both SY 17/18 and SY 18/19, but academic performance regressed slightly from 61% to 54%.

School Comments 2019-2020

Since all assessment and accountability requirements for SY 19/20 were waived due to the COVID-19 pandemic, schools were asked to describe their performance against their remote learning plans (see below).

- Content Mastery- The Academy used individualized learning plans for each student based on common core standards similar to a standards based report cards to insure parents and teachers had an accurate understand of each student's mastery. Tests and data are examined to chart student success.

	<p>Intervention is given as necessary to all students whether they attend school remotely or in-person.</p> <ul style="list-style-type: none"> • Addressing learning gaps (e.g. serving students with disabilities)- , Intervention is given as necessary to all students. Students work in small groups with reading and math specialists as well as with their classroom teacher to insure students receive help in the areas that intervention is needed. • Equity (e.g. measuring and addressing the technology gap, technological literacy)- Our Academy has provided to Chromebooks to each student whether they are remote or in-person learners. For the 2020-2021 school year hot spots have also been made available to all students to assure the ability to learn online at home. Teachers and staff are in touch and available to families to provide technological assistance. • Student engagement- Students attend classes daily via Google Meets. Each teacher holds class and the remote learners are an interactive part of live lessons every day. As stated previously the Academy has provided Chromebooks to every student and in the 2020-2021 school year, hotspots are available to all students to allow internet access. Online learners interact in each lesson. Teachers check for understanding and activity with online throughout each lesson. • Student wellness (e.g. challenges at home)- The Academy has an on-sight counselor. We also have life skills and social skills related arts classes held weekly for all grade levels. These allow for students to discuss and receive assistance for issues they may be having at home or in school. • Assessment and measure of success- Students were given assignment and assessments to complete. They were given options of completing and submitting tasks electronically or by completing a physical packet of assignments. Parents could come to the school to pick up these packets or staff members delivered packets to the students’ homes. • Grade level differences- Overall lower grade students had a more difficult time completing or getting online than the upper grade level students. Often lower grade students completed the physical packets of work or worked online after a parent was home from work to assist them. • Lessons learned and improvements for school year 2020-2021 (e.g. preparation, content, synchronous vs asynchronous learning, etc.) The Academy continued to make sure that each student had their own Chromebook to use at home for remote learning and in-person learning. For the 2020-2021 school year hotspots were made available to allow students better internet access for online remote learning.
<p>School Comments 2018-2019</p>	<p>The proficiency scores had a slight decrease from the prior year. The Academy continues to work to increase the rigor and the curriculum across all grades, as well as to enhance the RTI process for Reading and Math. Weekly data reviews occur during the PLCs. Although many students are making gains, it is not yet enough to put them at grade level. AOD is working to close this gap by continuing to implement a more rigorous RTI program for both Reading and Math. Moreover, for both core contents (math and reading), AOD is piloting and planning a full rollout of new curriculum. Engage New York and EL Education are new and expected to support an increase in student achievement. Professional development, teacher coaching, and DOE’s CIP Mentoring program are also in place to meet teacher needs. The Academy has a weekly PLC that is focused on student data and curriculum and instruction</p>

	<p>practices. With the ongoing monitoring and focus on instruction and academic growth, we are confident that the academic success of our students will increase. The beginning of the year assessment data compared with the mid-Marking Period 2 data demonstrates growth in both math and reading for the vast majority of our students. It has also allowed us information to enable us to better target the individual needs of our students.</p>
<p>School Comments 2017-2018</p>	<p>AOD went up in proficiency scores during the 2015-16 and 2016-17 school years. However, in 2017- 18 there was a decrease in the area of Math overall. For ELA, grades 3 and 5 went up from the previous year, with grade 5 exceeding the state average. However, grade 4 showed a decrease in both ELA and Math. Although AOD has the rating of Approaching Expectations, there is still concern as to what led to the decrease in proficiency. While tracking data for a specific group of students, there was an increase in proficiency from grade 3 in 2017 to those same students in grade 4 during the 2018 school year. These students were also very low in RTI during their 2nd grade year and have shown a consistent pattern with being below grade level for the last few years. While those students are making gains, it is not enough to put them at grade level. AOD is working to close this gap by implementing a more rigorous RTI program for both Reading and Math. There has also been an increase in professional development for differentiating instruction. Teachers began taking a deeper look at their student data during PLC's and making plans to help their student's master specific skills. Also, the Enrichment program has increased in participation to about 80% of our 3rd through 5th graders. There are small accomplishments overall with students increasing in scores, however, AOD will continue to work to close the gaps and help our students get closer to meeting their growth targets each year.</p>

Performance Agreement

Academic Performance Expectations

Academy of Dover Charter School's 2018-2019 overall academic ratings are:

- Academic Achievement: Approaching Standard
- Growth: Approaching Standard
- On Track to Graduation: Exceeds Standard
- College and Career: Approaching Standard

By September 2021, our expectation is to achieve overall ratings of "Meets" or "Exceeds" standard as measured by the Delaware School Success Framework. Each year, we will show growth within our overall rating putting us on track to achieve our academic performance expectations. This progress will be monitored through our annual performance review.

a) Discuss the school's academic performance based on its approved Performance Agreement (see above).

DOE Summary:

AOD has earned overall ratings of "Approaching Expectations" in SY 17/18 and SY 18/19. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.

School Comments 2019-2020

The 2019-2020 school year was the third year of implementation for ESSA. Therefore, some of the categories listed above are not listed on the new ESSA report. Academic Achievement and Academic Progress (Growth) have remained at Approaching Expectations for these last year/s. The overall for 2019-2020 is Approaching Expectations. AOD has taken proper steps to help the students meet their proficiency goals, and to provide support for the teachers to achieve this goal. The Academy remains confident that we will obtain Meets the Standard rating by 2021. The Academy is using the Edmentum program to provide online learning paths for students based on diagnostic tests. In 2020-2021 school year we will be implementing more rigorous curricula via EL Education in ELA and Eureka for Math across all grades. We have a curriculum map and pacing guide in place with structured scheduled conversation and updates during PLCs and staff meetings.

School Comments 2018-2019

The 2018-2019 school year was the second year of implementation for ESSA. Therefore, some of the categories listed above are not listed on the new ESSA report. Academic Achievement and Academic Progress (Growth) have remained at Approaching Expectations for these last year/s. The overall for 2018-2019 is Approaching Expectations. AOD has taken proper steps to help the students meet their proficiency goals, and to provide support for the teachers in order to help

	make this happen. AOD remains confident that we will obtain the Meets standard rating by 2021.
School Comments 2017-2018	The 2017-18 school year was the first year of implementation for ESSA. Therefore some of the categories listed above are not listed on the new ESSA report. Academic Achievement and Academic Progress {Growth} have remained at Approaching Expectations for the last 2 years. The ESSA report reflects School Quality which reflects an Exceeds rating and ELL proficiency shows a Meets rating. The overall for 2017-18 is Approaching Expectations. AOD has taken proper steps to help the students meet their proficiency goals, and to provide support for the teachers in order to help make this happen. AOD is still confident that we will get to the Meets standard by 2021.

2.2 Academic Achievement/Proficiency Data

DSSF Definition: *Proficiency* in a given subject is the percent of students who are on grade level (i.e., proficient) in said subject.

Metric	2017-2018			2018-2019			2019-2020		
	Value	Points	Points Earned	Value	Points	Points Earned	Value	Points	Points Earned
Proficiency – ELA	50.79%	75.00	38.00	39.53%	75.00	30.00	Due to COVID-19, all SY 19/20 assessment and accountability requirements have been waived by the U.S. Department of Education.		
Proficiency – Math	39.63%	75.00	30.00	28.54%	75.0	21.00			

DOE Summary:

In SY 18/19, AOD earned an “Approaching Expectations” rating for Academic Achievement. ELA proficiency was at 39.53%, a decrease of 11.26% since SY 17/18 and 13.17% less than the State average (52.7%). Math proficiency was at 28.54%, a decrease of 11.09% since SY 17/18 and 13.56% below State average (42.1%).

a) Based on the school’s Academic Achievement ratings over the course of the school year, discuss the school’s current performance and provide explanations/root causes (positive and negative) for the results. Please include local assessment data if applicable.

a) Academic Achievement ratings over the course of the charter term

School Comments 2019-2020	<i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i>
----------------------------------	---

School Comments 2018-2019	The school did not provide a response.
School Comments 2017-2018	<p>Based on the proficiency data for both ELA and Math, AOD had a decline overall from the previous year. ELA went from 61% proficient to 51% and Math went from 56% to 40% proficient. However, when looking at disaggregated data, 3rd grade went up 5% in ELA and Math. 5th grade stayed above the state average with a 66% in ELA. There was a drop in our Special Education population overall. One factor was that there was a new Special Ed team during the 2017-18 school year. A lot of efforts were spent making sure the department was in compliance. There was a lack of training in SBAC for the special education team consisting of a full time teacher and a part time paraprofessional. One continuing area of focus is the amount of time that the special education team administers the SBAC to our Special Education students. Due to the amount of Special Ed students needing testing with accommodations, it was hard for the special education teachers to continue working with other students during the testing window. This left more strain on the classroom teachers that are dual certified, to ensure that those students were receiving the proper amount of accommodations and services. AOD feels that this had a negative impact on the scores. The School Success Team is working to come up with a better solution for this problem.</p> <p>Grade 4 proficiency scores decreased in both ELA and Math during the 2017-18 school year as compared to the two years prior. This group of students have had a pattern of staying under grade level as proven by their 2nd grade RTI data, and their 3rd and 4th grade SBAC proficiency data. The end of year DIBELS data showed that in 4th grade, 51% of students were at Benchmark for reading and 54% for SMI math. This was the lowest percentage school wide. (Appendix 1: RTI data chart). While a majority of those students remain under grade level, they are showing individual growth consistently each year.</p>

b) Expected outcomes for Academic Achievement

2019-2020	<i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i>
School Comments 2018-2019	<p>The Academy continues to work to increase the rigor and the curriculum across all grades, as well as to enhance the RTI process for Reading and Math. Weekly data reviews occur during the PLCs. Although many students are making gains, it is not yet enough to put them at grade level. AOD is working to close this gap by continuing to implement a more rigorous RTI program for both Reading and Math. Moreover, for both core contents (math and reading), AOD is piloting and planning a full rollout of new curriculum. Engage New York and EL Education are new and expected to support an increase in student achievement. Professional development, teacher coaching, and</p>

	<p>DOE's CIP Mentoring program are also in place to meet teacher needs. The Academy has a weekly PLC that is focused on student data and curriculum and instruction practices. With the ongoing monitoring and focus on instruction and academic growth, we are confident that the academic success of our students will increase. The beginning of the year assessment data compared with the mid-Marking Period 2 data demonstrates growth in both math and reading for the vast majority of our students. It has also allowed us information to enable us to better target the individual needs of our students.</p>
<p>School Comments 2017-2018</p>	<p>Knowing that the decrease in Special Education was a huge concern, AOD has hired another full time Special Education teacher and contracted with an experienced Education Diagnostician. Those staff members attend DOE's Special Education trainings and meet with the DOE Special Resources team to get further support as needed. They also work closely with the Education Diagnostician and attend PLC's within the building with the general education teachers to keep informed of practices within the classroom.</p> <p>There has been some reorganization within our testing grades (3rd_5th) where teachers have been moved around in hopes to help close those gaps. AOD will continue to work with teachers to ensure that RTI is being implemented with fidelity as well as providing support for small group differentiated instruction. AOD is also turning the focus on more writing so that students are better prepared to answer and write constructive responses that meet grade level standard. AOD will continue to implement the Enrichment afterschool program in the Spring. There has been an increase in students participating over the last two years. AOD will continue to work on meeting this standard and increasing our proficiency scores each year.</p>

c) Progress measures to track expected Academic Achievement outcomes

<p>School Comments 2019-2020</p>	<p><i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i></p>
<p>School Comments 2018-2019</p>	<p>Teachers will continue to meet in PLC to regularly track data in order to establish the best instructional strategies to meet student needs. AOD will also continue to offer support to teachers and make changes to the instructional program where needed. Data such as RTI, formative and summative classroom assessments, and the SBAC will determine if AOD is on track to meet expected outcomes. The Academy Instructional Leadership Team will also work together to track data and reflect on efforts that have a direct link to the Success Plan.</p>

**School Comments
2017-2018**

Teachers will continue to meet in PLC to track data regularly. This will drive their instruction in the classroom. AOD will also continue to offer support to teachers and make changes to the instructional program where needed. Data such as RTI, informal classroom assessments, and the SBAC will determine if AOD is on track to meeting the expected outcomes. The School Success Team will work to track this data to work towards meeting the goals as reflected on the Success Plan.

2.3 Academic Progress

DSSF Definition: Growth measures how well schools are doing at improving student learning over time. This metric is a relative calculation of student progress as compared to students with similar assessment history on statewide summative assessments.

Metric	2017-2018			2018-2019			2020-2021		
	Value	Points	Points Earned	Value	Points	Points Earned	Value	Points	Points Earned
Growth - ELA	68.23%	75.00	51.00	60.22%	75.00	45.00	Due to COVID-19, all SY 19/20 assessment and accountability requirements have been waived by the U.S. Department of Education.		
Growth - Math	50.93%	75.00	38.00	51.72%	75.00	39.00			
Growth of Highest Quartile - ELA	60.95%	12.50	8.00	66.13%	12.50	8.00			
Growth of Highest Quartile - Math	72.82%	12.50	9.00	50.37%	12.50	6.00			
Growth of Lowest Quartile - ELA	82.17%	12.50	10.00	55.73%	12.50	7.00			
Growth of Lowest Quartile - Math	33.88%	12.50	4.00	52.25	12.50	7.00			

DOE Summary:

AOD's performance relative to Academic Progress/Growth improved from SY 17/18 to SY 18/19, earning "Approaching Expectations" and "Meets Expectations," respectively. AOD has met or exceeded expectations for Academic Progress. AOD has outperformed State averages in 4 out of 6 metrics as noted below.

English Language Arts – SY 18/19

- 60.22% of AOD students met growth targets in English Language Arts, which was nearly equal to the State average (60.92%). From SY 17/18 to SY 18/19 performance regressed 8.01% from 68.23%.
- 66.13% of AOD students in the highest quartile met growth targets in English Language Arts, which was 3.81% higher than the State average (62.32%). From SY 17/18 to SY 18/19 performance improved 5.18% from 60.95%.
- 55.73% of AOD students in the lowest quartile met growth targets in English Language Arts, which was 6.77% lower than the State average (62.5%). From SY 17/18 to SY 18/19 performance regressed 26.44% from 82.17%.

Math – SY 18/19

- 51.72% of AOD students met growth targets in math, which was 7.38% lower than the State average (59.1%). From SY 17/18 to SY 18/19 performance improved .79% from 50.93%.

- 50.37% of AOD students in the highest quartile met growth targets in math, which was 11.95% lower than the State average (62.32%). From SY 17/18 to SY 18/19 performance regressed 22.45% from 72.82%.
- 52.25% of AOD students in the lowest quartile met growth targets in math, which was 10.25% lower than the State average (62.5%). However, from SY 17/18 to SY 18/19 performance improved 18.37% from 62.76% to 72.85%, respectively.

a) School's Growth ratings for all students over the course of the charter term

School Comments 2019-2020	<i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i>
School Comments 2018-2019	Students in grades 4 and 5 take the SBAC each spring. DOE sets a specific growth target for each student based on their previous year SBAC results for reading and math. We are working with our educators to individualize and meet their instructional needs in reading and math on a regular and ongoing basis.
School Comments 2017-2018	Students in grades 4 and 5 take the SBAC each spring. DOE sets a specific growth target for each student based on their previous year SBAC results for reading and math. Where our proficiency rates went down overall in 4th grade, our 5th grade increased in ELA but decreased in Math. In comparison to the state, AOD's growth in ELA was slightly higher than the state but lower than the state in Math. This is consistent with our decrease in math proficiency overall for the 2017-18 school year. In looking at disaggregated data, students are making growth, but not all students are making the amount of growth needed to meet their targets. AOD is looking at how to close these gaps, especially among our lowest quartile including our special education students. The School Success Team met to determine underlying root causes and to develop plans to help close these gaps. Some of the reasons for this gap are 1) AOD had a new special education team, including case manager, teachers, and a para during the 2017-18 school year. We also had more special education students enrolled during the 2017-18 school year than we did in the year prior. 2) A majority of students in grade 4 during the 17-18 school year have been performing below grade level in reading and math as demonstrated in RTI data from their previous grades, as well as SBAC data from 3rd grade. 3) A majority (4/6) of the 3rd_5th grade teachers were in their first three years of teaching. These teachers needed a lot of support and mentoring throughout the school year. Through observations, mentoring program, PLC, professional development, etc. teachers are provided with a lot of support throughout the school year.

b) Expected outcomes for Growth for all students

<p>School Comments 2019-2020</p>	<p><i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i></p>
<p>School Comments 2018-2019</p>	<p>We expect that all of our students will make gains academically this year. We have multiple targeted efforts in place to achieve this goal. Our steps to this include our regular monitoring of data, weekly PLCs with ongoing data review, regular classroom instructional walkthroughs, ongoing professional development and coaching sessions with our educators, cross-observations so that our novice educators can observe our more seasoned educators and vice-versa. We have our students reviewing and discussing their individual growth on their reading and math and are empowering them with the strategies to achieve these goals and to love learning at the same time. In addition, we are focusing on continuing to push our students who are achieving at a higher level to grow even further through differentiated instruction and grouping.</p> <p>The Academy Instructional Leadership Team will continue to meet to review school wide data and make plans for closing the gaps. The team recognizes both are areas of strength and weaknesses, and spend a great deal of time focusing on how to make changes to positively affect those areas.</p> <p>The action plan to achieve these outcomes includes, but is not limited to the following:</p> <ul style="list-style-type: none"> *Continue to implement effective instructional strategies in small group reading *Progress monitor targeted students (weekly, bi-weekly or monthly) to use that data to drive instruction and inform RTI instruction and small group placements *Teacher will use PLC time to reflect on instruction, analyze student data and determine instructional needs *Anticipated 21st Century CCLC Grant (Afterschool math and ELA literacy support) *Family engagement *Teachers in grades 3-5 will explicitly work with students in preparation for the state assessments *Instruction will continue to be provided by highly qualified teachers *Utilize paraprofessional support for Math, ELA and Reading RTI *Staff will participate in professional development *Teachers will focus on the writing process across all content areas. <p>In addition to research based instruction and strategies, the action plan will also include increasing opportunities to create a safe, healthy, and nurturing environment for the whole child. One example of this effort will be to increase students social emotional learning and appropriate behavior through utilizing elements of Restorative Practice, students participating in the Academy Leaders including the Bow Tie Boys and Blue Ribbon Girls, PBIS,</p>

	<p>and our implementation of the Second Step Curriculum, as well as additional student-focused activities to continue to build upon their social-emotional and academic abilities. Next, increasing student attendance rates by daily attendance monitoring, parent communication (i.e. phone calls and letters). We anticipate an increase in student progress by enacting these measures.</p> <p>Furthermore, continuing to foster parent involvement and engagement will be a vital piece to meeting our academic goals. Providing a variety of opportunities for our parents (An Evening at the Academy (formerly AOD night), AOD's Got Talent (formerly our spring AOD night), PTO, open house, parent conferences, PBS events, fundraisers, Special Education Parent Council, etc.) are expected to impact and improve student gains.</p>
<p>School Comments 2017-2018</p>	<p>The School Success Team will continue to meet to look over school wide data and make plans for closing the gaps. Some changes that have occurred for the current school year are 1) reorganization among teachers in grades 3-5 so that there are more experienced teachers in those grades. 2) Teachers work in PLC to dive into their student data and determine methods to help focus on weaker areas in small group. Students spend about 3 hours per day in small groups through reading, math, and RTI. The reading and math interventionists also participate in these PLC's each quarter to not only look at RTI data but to help teachers strategize and come up with alternative plans for their tier 2 and 3 students to help them make gains within RTI. 3) When looking at SBAC data from 2017-18, teachers noticed that writing was a weak area school wide. For the 2018-19 school year, a writing program has been purchased and teachers are focusing a lot on writing across the subjects. This is a big topic in PLC as well. 4) AOD will continue to hold the Enrichment after school program in the Spring. This program runs for about 8 weeks and is organized and planned by the 3rd_5th grade teachers and administrators. The program has increased in participation over the last 2 years and the school expects the program to continue growing. 5) Staff will continue to participate in a number of professional development opportunities throughout the school year. 6) The Instructional Support Team or IST, will continue to meet to monitor RTI data and to make adjustments in the curriculum to help those not making gains in RTI. This team consists of the teachers, special education staff, interventionists, and administrators. AOD staff recognizes the weak areas and spends a great deal of time focusing on how to make changes to positively affect those areas.</p>

c) Progress measures to track Growth for all students

<p>School Comments 2019-2020</p>	<p><i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i></p>
<p>School Comments 2018-2019</p>	<p>Using the Instructional Leadership Team, the school/teachers will track data using Star Renaissance for math and reading and formative/summative instructional assessment measures.</p>

School Comments 2017-2018	Using the School Success Team the school will track data using SMI and DIBELS. Teachers will also track their student data in PLC for any formative assessments done in class. This will help the team determine if the school in on the right track to meeting their expected progress.

2.4 School Quality/ Student Success

Metric	2017-2018			2018-2019			2019-2020
	Value	Points	Points Earned	Value	Points	Points Earned	
Chronic Absenteeism	93.65%	50.00	47.00	90.35%	50.00	45	Due to COVID-19, all SY 19/20 assessment and accountability requirements have been waived by the U.S. Department of Education.
Proficiency - Science(grades 5 and 8)	n/a	n/a	n/a	n/a	n/a	n/a	
Proficiency - Social Studies(grades 4 and 7)	n/a	n/a	n/a	n/a	n/a	n/a	

DOE Summary:

In SY 18/19, AOD earned a rating of “Exceeds Expectations” for School Quality/Student Success. 93.65% of students demonstrated on-track attendance, which was 6.1% higher than the State average (87.55%). The State assessments for social studies and science were not administered in SY 18/19.

- a) Based on the school’s School Quality/ Student Success ratings over the course of the school year, discuss the school’s current performance and provide explanations/root causes (positive and negative) for the results.

School Comments 2019-2020	<i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i>
School Comments 2018-2019	The Academy of Dover monitors attendance daily through eSchool. Policies are put in place to address excessive tardiness and absences in an ongoing effort to keep students in school.
School Comments 2017-2018	Academy of Dover monitors attendance daily through E-School. Policies are put in place to address excessive tardiness and absences in an ongoing effort to keep the students in school. During the 2017-18 school year, there were a couple truancy issues which resulted in taking the families to truancy court. We saw a slight decrease in 2017-18 than we did the previous year due to these truancy issues. One family {2 students} stopped coming to school in January last year and was marked absent through June. This had a huge impact in our attendance rate. Those students have since moved to another state.

- b) Looking ahead, what are your expected outcomes for School Quality/ Student Success and what steps will you take to achieve them?

School Comments 2019-2020	<i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i>
School Comments 2018-2019	Because of our school effort to keep students in school, AOD expects to continue meeting the attendance requirement. Protocols are in place for sending notices to families if their child has a certain amount of tardiness or absences. Once a student gets to 10 days unexcused absence, a referral is made to truancy court. Usually once a parent receives a warning letter, they change the pattern so that their child attends regularly and on time. However, there are occasions when we need to put a more formal process in place.
School Comments 2017-2018	Because of the school's efforts to keep students in school, AOD expects to continue meeting the attendance requirement. Protocols are in place for sending notices to families if their child has a certain amount of tardiness or absences. Once a student gets to 10 days unexcused absence, a referral is made to truancy court. Usually once a parent receives a warning letter, they change the pattern so that their child gets to school on time each day. However, there are times that this does not work and the school has to take further steps.

c) Describe how you will measure progress to determine whether you are on track to meet your expected School Quality/ Student Success outcomes.

School Comments 2019-2020	<i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i>
School Comments 2018-2019	The school will continue to track student attendance. Each marking period the school runs a report to see which students are at the point to receive warning letters or attendance hearings. AOD has met this attendance goal for the last several years, and plans to continue monitoring attendance daily and taking the proper procedures to ensure that the students are compliant
School Comments 2017-2018	The school will continue to track student attendance. Each marking period the school runs a report to see which students are at the mark to receive warning letters or attendance hearings. AOD has met this attendance goal for the last several years and plans to continue monitoring attendance daily and taking the proper procedures to ensure that the students attend school.

2.5 Progress toward English language proficiency (ELP) *

Beginning in the 2017-2018 school year, every school was measured on student “Progress toward English language proficiency (ELP)” This metric is an index calculation that measures the percentage of all current ELs who make annual progress toward ELP as measured by the statewide ELP assessment. ELP is defined as scoring a PL of 5.0 on the statewide ELP assessment. Attainment has been defined in Delaware as a PL of 5.0 and a level in which a student is considered to have met a proficiency level comparable to their native English speaking peers. [Therefore, a PL of 5.0 is considered a student’s Attainment Target \(AT\).](#)

Metric	2017-2018			2018-2019			2019-2020		
	Value	Points	Points Earned	Value	Points	Points Earned	Value	Points	Points Earned
Progress Toward English Language Proficiency	76.95%	50.00	38.00	65.04%	50.00	33.00	Due to COVID-19, all SY 19/20 assessment and accountability requirements have been waived by the U.S. Department of Education.		

DOE Summary:

In SY 18/19, 65.04% of AOD English learners demonstrated English language proficiency, which equated to an “Approaching Expectations” rating for this metric. AOD’s performance was slightly less than the State average (66%). From SY 17/18 to SY 18/19 performance regressed 11.91% from 76.95% (“Meets Expectations”) to 65.04%, respectively.

a) Based on your Progress toward English language proficiency (ELP) ratings over the course of the school year, discuss the school’s current performance and provide explanations/root causes for the results. Please include local assessment data if applicable.

School Comments 2019-2020	<i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i>
----------------------------------	---

School Comments 2018-2019	AOD has received a Meets Expectation for English Language Proficiency (ELP). The Academy has seen an increase in the ELL population over the past several years. During the 2016-17 SY, there were approximately 11 ELL students, that number tripled during the 2017-18. Since then, The Academy has seen another significant increase of ELL students; our current enrollment show 26 ELL students. AOD contracts with an ELL teacher who works with students each week – in small group. She provides screening to new students entering AOD who have a home language survey that reflects another language spoken in the home. The ELL teacher also administers the ACCESS each Spring. Based on results gathered, AOD is proud of our efforts and accomplishments and the value that our ELL
----------------------------------	---

	program provides to our students and families.
School Comments 2017-2018	AOD received a Meets Expectation for English language proficiency (ELP). The school has seen an increase in the ELL population over the last 3 years. During the 16-17 school year, there were about 11 students in ELL, that number tripled during the 2017-18 school year. AOD contracts with an ELL teacher who works with students each week in small group. She provides screening to new students entering AOD who have a Home language survey that reflects another language spoken in the home. The ELL teacher also administers the ACCESS each spring. Based on the above results, AOD is proud of this accomplishment and the value that our ELL program provides to our students and families.

b) Looking ahead, what are your expected outcomes for Progress toward English language proficiency (ELP) and what steps will you take to achieve them?

School Comments 2019-2020	<i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i>
School Comments 2018-2019	AOD will continue working towards meeting this expectation. If our numbers continue to increase, we may need to consider additional staff in order to support and provide ELL services.
School Comments 2017-2018	AOD will continue working towards meeting this expectation. If our numbers continue to increase, we may need to look at adding an additional staff member to provide support to those ELL students. The program seems to be effective and we will continue to make sure we are meeting the needs of our ELL population.

c) Describe how you will measure progress to determine whether you are on track to meet your expected Progress toward English language proficiency (ELP) outcomes.

School Comments 2019-2020	<i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i>
School Comments 2018-2019	Progress will continue to be measured by the ACCESS test given to students each Spring. The ELL teacher keeps track of the data and works with the students on needed areas/skills.

**School Comments
2017-2018**

Progress will continue to be measured by the ACCESS test given to students each Spring. The ELL teacher keeps track of the data and works with the students on the areas that each student is lacking in.

III. ORGANIZATIONAL PERFORMANCE

The Organizational Performance Framework reflects expectations the charter school is required to meet through state and federal law and the charter performance agreement, and seeks to provide information regarding these key questions:

- Is the school organizationally sound and well operated?
- Is the school fulfilling its legal obligations and sound public stewardship?
- Is the school meeting its obligations and expectations for appropriate access, education, support services, and outcomes for students with disabilities?

3.1 Mission Specific Goal(s)

Is the school faithful to its mission as defined in its current charter, including approved mission-specific academic goals if applicable?

1a. Is the school faithful to its mission as defined in its current charter, including approved mission-specific academic goals if applicable?

MEETS STANDARD: (WHAT IS THE MISSION SPECIFIC GOAL?)

One part of AOD's mission is to provide a school that is positive, safe, purposeful, and productive. Therefore, AOD will work to decrease the number of discipline referrals for 2017-18 by 25% when compared to the referral data from the 2016-17 school year.

During the 19/20 School year, the Academy met the goal of expanding activities and initiatives for the Positive Behavior Support Program in order to provide a more safe and secure school environment. AOD is continuing the process of working towards a "star school" status through PBS.

We had a total of 71 referrals during the entire 19/20 school year, decreasing from 130 in 16/17, and 90 in 17/18. The data is attached.

DOE Summary:	
AOD has earned a "Meets Standard" rating for its mission-specific goal for the past three years of its current charter term.	

a) School's organizational performance over the current charter term.

School Comments 2019-2020	The Academy met the goal of decreasing the number of discipline referrals.
--------------------------------------	--

School Comments 2018-2019	<p>The Academy did meet the mission of decreasing the number of discipline referrals by reducing the number of referrals as obtained by the EdInsight Dashboard report. This is a significant decrease in the number of referrals.</p>
School Comments 2017-2018	<p>The above mission specific goals are from the previous year (2016-17). The 2017-18 goals are attached. The goal was to decrease the number of discipline referrals by 25% or greater when comparing data from 2016-17 school year to 2017-18 school year. AOD had a decrease of 31% in referrals during the 2017-18 school year, which Meets Standard. Data charts are attached to reflect the discipline data. This data was provided to DOE. In FY 2017 there were 130 referrals, which decreased from 235 referrals the previous year. In FY 2018 there were a total of 90 referrals which was a 31% decrease. AOD is on a 3 year trend with meeting this goal.</p>

3.2 Organizational Performance

Note: Please utilize the hyperlink in this sentence for more information about the [Organizational Performance Framework](#).

SUMMARY AND OVERALL RATING

Year	Education Program				Governance & Reporting			Students & Staff		Facilities, Transportation, Health & Safety	OVERALL RATING
	Mission Fidelity	Applicable State & Federal Requirements	Students with Disabilities	English learners	Governance & Public Stewardship	Oversight of School Management	Reporting Requirements	Students Rights	Req. on Teacher Certification & Hiring Staff		
	1a	1b	1c	1d	2a	2b	2c	3a	3b		
2017-2018	M	M	M	M	M	M	M	M	M	M	Meets Standard
2018-2019	M	M	M	M	M	M	M	M	AS	M	Meets Standard
2019-2020	M	M	M	M	AS	M	M	M	M	M	Meets Standard

DOE Summary:

AOD earned overall ratings of “Meets Standard” for the past three years of its current charter term. In SY 18/19, the school earned an “Approaching Standard” rating for measure 3b. (Requirements on Teacher Certification and Hiring Staff) In SY 19/20, the school’s performance on this measure improved to “Meets Standard.” In SY 19/20, the school earned an “Approaching Standard” rating for measure 2a (Governance and Public Stewardship) and earned “Meets Standard” ratings on the other measures.

a) School's organizational performance over the current charter term

School Comments 2019-2020	With the exception of one criteria, AOD received Meets the Standards in all areas of the Organizational Framework.
School Comments 2018-2019	With the exception of one criteria, AOD received a Meets Standards in all areas of the Organizational Framework.
School Comments 2017-2018	AOD received a Meets Standard in all areas of the Organizational Framework.

b) Changes to organizational practices that the school has implemented to improve the school's organizational outcomes

<p>School Comments 2019-2020</p>	<p>The Academy has made changes and corrections in order to maintain the organizational progress areas that have achieved the ratings of “Meets the Standard”, and have taken corrective measures to meet annual progress. For the last several years the Academy has received a Meets Standard in all areas of the Organizational Framework. The Head of School works with the Board to ensure all Board members and CBOC members are properly trained by DOE and works diligently to ensure that all deadlines are adhered to and reports are submitted on time. The school webpage remains up to date and is recognized as Meets the Standard each month for the webpage monitoring by DOE. The Academy continues to provide safe and nurturing environment and remains compliant in the Omnibus School Safety Act.</p>
<p>School Comments 2018-2019</p>	<p>The Academy has made changes and corrections in order to maintain the organizational progress areas that have achieved the ratings of “Meets Standard”, and took corrective measures to meet annual progress. The current administration has a commitment to only hiring fully credentialed teachers. For the last several years AOD has received a Meets Standard in all areas of the Organizational Framework. The Head of School works with the Board to ensure that all Board members and CBOC members are properly trained by DOE and works diligently to ensure that all deadlines are adhered to and reports are submitted on time. The school webpage remain up to date and the school receives a Meets Standard each month for the webpage monitoring by DOE. The school continues to provide a safe and nurturing environment and remains compliant in the Omnibus School Safety Act.</p>
<p>School Comments 2017-2018</p>	<p>For the last three years AOD has received a Meets Standard in all areas of the Organizational Framework. The Head of School works with the Board to ensure that all Board members and CBOC members are properly trained by DOE and works diligently to ensure that all deadlines are adhered to and reports are submitted on time. The school webpage remains up to date and the school receives a meets standard each month for the webpage monitoring by DOE. The school continues to provide a safe and nurturing environment and remains compliant in the Omnibus School Safety Act.</p>

c) Indicator measure where school did not meet standard or is approaching standard

<p>School Comments 2019-2020</p>	<p>2. GOVERNANCE AND REPORTING</p> <p>Measure 2a.</p> <p>Is the school fulfilling essential governance and public stewardship responsibilities?</p> <p>School Response To Rating:</p> <p>We are monitoring all regulations code and requirement to insure that we meet the standards in all areas</p>
<p>School Comments 2018-2019</p>	<p>School comments for SY 2018-2019 can be found at: https://www.doe.k12.de.us/Page/2654</p>
<p>School Comments 2017-2018</p>	<p>School comments for SY 2017-2018 can be found at: https://www.doe.k12.de.us/Page/2654</p>

Performance Agreement

Organizational Performance Expectations

Academy of Dover Charter School's 2017-18 overall organizational rating is Meets Standard. By September 2021, our expectation is to achieve the overall rating of "Meets, as measured by the Organizational Performance Framework. Each year, we will be on track to demonstrate performance aligned with those organizational performance expectations. This progress will be monitored through our annual performance review.

DOE Summary:

Academy of Dover has earned overall ratings of "Meets Standard" for the past three years of its current charter term.

School Comments 2019-2020	For the last several years AOD has received a Meets Standard on all measures in the Organizational Framework. The Head of School works diligently to ensure that the school meets the criteria established in this agreement, and will continue to work hard to ensure that the Academy achieves high rating.
School Comments 2018-2019	For the last several years AOD has received a Meets Standard on all measures in the Organizational Framework. The Head of School works diligently to ensure that the school meets the criteria established in this agreement, and will continue to work hard to ensure that The Academy remains at that rating.
School Comments 2017-2018	For the last three years AOD has received a Meets Standard on all measures in the Org. Framework. The Head of School works diligently to ensure that the school meets the criteria established in this agreement, and will continue to work hard to ensure that school remains at that same rating for years to come.

3.3 Board Financial and Governance Members and Training

a) In accordance with Del. 14 §512 (15), the school shall have a satisfactory plan to ensure the effectiveness of its board of trustees, including governance trainings conducted for any new board members and at a minimum of once every 3 years.

Board Financial and Governance Training

First Name	Last Name	Term Begin Date	Term End Date	Role/Title	Financial Training Date	Board Governance Training Date*
Kimeu	Boynton			President	3/19/2014	6/11/2020
Bishop W. James	Thomas			Treasurer	7/31/2018	8/30/2018
Charles	Fletcher				9/15/2015	8/30/2018
Beverly	Williams					8/30/2018
Candace	Holmes				10/24/2018	
Phyllis	Robinson				10/24/2017	8/30/2018
Esosa	Iriowen				10/30/2019	
Michele	Marinucci			Head of School		
Teresa	Tridente				1/9/2020	

*Please list only the most recent training date.

DOE Summary:
As of May 1, 2021, Academy of Dover’s Board of Director’s was not in compliance with the State’s membership and board governance training requirements. One board member, Beverly Williams, has not completed the board financial training. Three board members (Candace Holmes, Esosa Iriowen, and Teresa Tridente, have not completed the board governance training.

School Comments 2019-2020	School did not provide a response
School Comments 2018-2019	School did not provide a response
School Comments 2017-2018	At the end of the 2017-18 school year, AOD's board gained a new Treasurer and a new Parent Representative. The members listed above were active for the 2017-18 school year. Each of the board members have been trained in the Finance training, and in August 2018, the Board and Head of School attended the DANA training for Board Governance. {Appendix 3: Certificates of the current members trained).

Note: This data element was included in SY 16/17 for direct school reporting. School information regarding the performance agreement for SY 16/17 and SY 17/18 can be found in their overall annual report at <https://www.doe.k12.de.us/Page/2654>

b) Pursuant to [14 Del. Admin. Code 736](#) 6.1 Each member of a Citizen Budget Oversight Committee shall attend and receive a Certificate of Completion for the Citizen Budget Oversight Committee training within the allotted timeframe of his/her appointment to a Citizen Budget Oversight Committee. Provided further, additional training may be required from time to time as determined by the Department.

Citizen Budget Oversight Committee Membership & Trainings

First Name	Last Name	Term Begin Date	Term End Date	Role/Title	Financial Training Date
Bishop W. James	Thomas				7/31/2018
Kimeu	Boynton				3/19/2014
Michele	Marinucci			Head of School	
Lauren	Comegys				12/18/2017
Esosa	Iriowen				10/30/2019
Richard	Riggs			DOE Representative	11/30/2015
Bill	Bentz			Consultant	1/11/2011
Ronda	Bacu				9/22/2020

DOE Summary:

As of May 1, 2021, Academy of Dover’s Citizens Budget Oversight Committee (CBOC) was in compliance with State’s membership and financial training requirements.

School Comments 2019-2020	School did not provide a response
School Comments 2018-2019	School did not provide a response
School Comments 2017-2018	At the end of the 2017-18 school year, AOD's Treasurer, teacher representative and community member all resigned. The school fulfilled the Treasurer and teacher representative vacancies. There was also a new Parent Representative added. Currently all CBOC members are trained by DOE in finance. AOD is currently looking for a new community member to add to the committee, and as of Jan 2019 will be looking for a new Parent Rep as well.

Note: This data element was included in SY 16/17 for direct school reporting. School information regarding the performance agreement for SY 16/17 and SY 17/18 can be found in their overall annual report at <https://www.doe.k12.de.us/Page/2654>

3.4 Teacher Retention

2017-2018			2018-2019			2019-2020		
% of Teachers RETAINED	# of Teachers RETAINED	# of Teachers ELIGIBLE	% of Teachers RETAINED	# of Teachers RETAINED	# of Teachers ELIGIBLE	% of Teachers RETAINED	# of Teachers RETAINED	# of Teachers ELIGIBLE
68.7%	11	16	72%	13	18	45%	9	20

DOE Summary:

Over the course of the charter term, Academy of Dover’s teacher retention rate decreased from 68.7% to 45%. However, from SY 17/18 to SY 18/19, the teacher retention rate increased slightly from 68.7% to 72%. From SY 18/19 to SY 19/20 the rate decreased 27%, from 72% to 45%.

a) School’s plans to monitor and minimize teacher attrition rates

School Comments 2019-2020	At the beginning of the 2019-2020 school year the Academy was in a transition to a new leadership team. The Academy was raising expectations and setting a higher standard for our educators. There was higher than expected turnover rate due to these circumstances. Currently in the 2020-2021 school year only 2 staff did not return and has remained consistent. A recent staff survey shows that all but one staff member plan to return for the 2021-2022 school year.
School Comments 2018-2019	The Academy continued to struggle with teacher retention and the Head of School and Board took action in December 2019 by implementing a salary adjustment for current staff and future staff that is more incentivizing to attract and retain high quality educators.
School Comments 2017-2018	AOD recruits and hires highly qualified teachers. One way we work to retain teachers is by offering a bonus pay based on job performance. AOD uses specific criteria to determine which teachers would qualify for the incentive. Also, they receive a retention bonus for returning each year. The longer the teacher has been at AOD the higher the bonus, up to \$1,000. A majority of the teachers leave because of salary. AOD does not have a pay scale that is competitive with districts, since charters do not get the same funding that districts receive. Many teachers stay for the first couple years of teaching to get experience and then leave in search of a higher salary for their experience and degree level.

b) School's professional development plans support teachers and leadership.

School Comments 2019-2020	Each year teachers are given a survey to identify their areas of need. This information is used to drive professional development the following year. The administration schedules PD around the teachers' needs expressed in the survey, and PD that will help teachers in the classroom based on the teacher observations. Administrations participate in all PD opportunities provided to school staff. During each of the weekly PLCs the staff are asked to share any of their current needs, which are immediately addressed if possible.
School Comments 2018-2019	Each year teachers are given a survey to identify their areas of need. This information is used to drive professional development the following year. The administration schedules PD around the teachers' needs expressed in the survey, and PD that will help teachers in the classroom based on teacher observations. Administration participate in all PD opportunities provided to school staff. During each of the weekly PLCs, the staff are asked to share any of their current needs, which are immediately addressed if possible.
School Comments 2017-2018	Each year teachers are given a survey to identify their areas of need. This information is used to drive professional development the following year. The administration schedules PD around the teachers needs expressed in the survey, and PD that will help teachers in the classroom based on teacher observations. Administration participate in all PD opportunities provided to school staff.

IV. FINANCIAL PERFORMANCE

4.1 Financial Performance

Note: Please utilize the hyperlink in this sentence for more information about the [Financial Performance Framework](#).

Financial Performance Framework Ratings	Near Term Indicators				Sustainability Indicators				Financial Management and Oversight	Overall Rating
	Current Ratio	Days Cash	Enrollment Variance	Default, Loan Covenants, & Debt Service Payments	Total Margin	Debt Asset Ratio	Cash Flow	Debt Service Coverage Ratio		
Year	1a	1b	1c	1d	2a	2b	2c	2d	3	
2017-2018	F	M	AS	M	AS	AS	F	N/R	M	Approaching Standard
2018-2019	F	AS	AS	M	F	F	F	N/R	M	Falls Far Below Standard
2019-2020	M	M	AS	M	M	M	AS	N/R	M	Meets Standard

DOE Summary:

Academy of Dover’s overall ratings have improved over the course of its current charter term. The school met standard in SY 19/20, but in SY 17/18 and SY 18/19, the school received ratings of “Approaching Standard” and Falls Far Below Standard,” respectively. At the individual measures level, in SY 17/18 AOD had 5 out of 8 measures that did not meet standard (2-Falls Far Below Standard; 3-Approaching Standard). In SY 18/19, AOD had 6 out of 8 measures that did not meet standard (4-Falls Far Below Standard; 2-Approaching Standard). In SY 19-20, AOD did not have any measures rated “Falls Far Below Standard” and received two ratings of “Approaching Standard.”

a) School's financial performance over the current charter term

School Comments 2019-2020	New leadership came on and the enrollment as well as the financial situation at the Academy was not up to par. Focused efforts were made to insure the school is in a stronger position both academically and financially. Regular monitoring of both academic and financial operations occur.
School Comments 2018-2019	While we are very aware and acknowledge that the most recent audit, completed June 30, 2019, shows some concerning results in the Financial

	<p>Performance Framework, we also know that we are making the right changes over the past few months and that the charter modification will be significant in our future financial viability. One factor that has had a longstanding and major effect on a number of the financial frameworks for the Academy is the Mosiaca Settlement. This debt has been paid in full as of from the local reserves, and will also have a significant impact on the local funds.</p>
<p>School Comments 2017-2018</p>	<p>AOD has met standard in only 2 of the 8 measures. There have been improvements in 1b and 2b where we have gone up in those areas over the last two years. However, in 1a there was a decrease in rating and all other areas have remained the same from fiscal years 2017 to 2018. We have outlined more specific information for each metric in the sections below.</p>

b) Financial practices that the school has implemented to improve the school's financial outcomes

<p>School Comments 2019-2020</p>	<p>All financial management is now done in house which allows for better oversight and real time monitoring of the financial matters.</p>
<p>School Comments 2018-2019</p>	<p>The budget is being strictly adhered to and regularly monitored. Once change that has occurred is that the Head of School is the person managing the finances.</p>
<p>School Comments 2017-2018</p>	<p>Since our revenue is directly related to our student enrollment, we are attempting to reach our authorized enrollment figures of 287 students. We are also attempting to control our expenses, since there has not been any measureable increase in revenue from our major revenue sources which are the State of Delaware and the local school districts.</p>

c) Indicator measure where school did not meet standard or is approaching standard

School Comments
2019-2020

1. NEAR TERM INDICATORS

Measure 1c. Enrollment Variance:

Actual Enrollment as of September 30 divided by Authorized Enrollment

2019-2020
89%

The enrollment variance depicts actual versus authorized enrollment. A school budgets based on projected enrollment but is funded based on actual enrollment; therefore, a school that fails to meet its enrollment targets may not be able to meet its budgeted expenses. The preferred result is more than 95%.

School Response To Rating:

Since June 30th 2019, a myriad of enrollment and recruitment methods have been employed that have demonstrated an increase in enrollment and an upward trend. These have resulted in the Academy currently having an 99.7% enrollment variance in the 2020-2021 school year.

2. SUSTAINABILITY INDICATORS

Measure 2c. Cash Flow

2019-2020
1 YR: \$172007
3 YR: \$159095

Cash flow indicates the trend in the school's cash balance over a period of time. This measure is similar to days cash on hand, but indicates long-term stability versus near-term. Since cash flow fluctuations from year-to-year can have a long-term impact on a school's financial health, this metric assesses both three-year cumulative cash flow and annual cash flow. The preferred result is greater than zero.

School Response To Rating:

The cash flow for the three-year period has been negative, resulting in a metric rating of far below standard. Since the audit report, there have been concerted efforts with the budget to fix this

concern and meet the standard. The July 31, 2019 board approved budget shows a reserve amount of \$67,320.01, while the October 31, 2019 board approved budget has increased the contingency reserve to \$258,056.18 with an additional \$33,883.16 in additional unallocated funds. While this is not where it needs to be, it is significantly higher than it was in a short amount of time and trending in the right direction. This remains a focus of the Academy. The charter modification agreement will significantly impact this and will further enable the Academy to meet the standard of having a positive cash flow each year. In addition, in December 2020 contingency fund now has \$712,979.39 with an additional \$65,487.90 in unallocated funds. This shows the Academy's continued move in the right direction for cash flow.

**School Comments
2018-2019**

School comments for SY 2018-2019 can be found at: <https://www.doe.k12.de.us/Page/2654>

**School Comments
2017-2018**

School comments for SY 2017-2018 can be found at: <https://www.doe.k12.de.us/Page/2654>

Performance Agreement

Financial Performance Expectations

Academy of Dover Charter School's 2015-16 overall financial rating is Meets Standard. By September 2021, our expectation is to achieve the overall rating of "Meets" standard as measured by the Financial Performance Framework. Each year, we will be on track to demonstrate economic viability and achieve our financial performance expectation. This progress will be monitored through our annual performance review.

DOE Summary:

Academy of Dover has earned an overall rating of "Meets Standard" in SY 19/20, the most recent year of its current charter term. Prior year performance did not meet standard.

School Comments 2019-2020	The Academy has continued to monitor and improve our economic viability. The two areas that were Approaching Standard have continued to improve. As of FY 21 our contingency fund has increased by over 1,000%.
School Comments 2018-2019	While we are very aware and acknowledge that the most recent audit, completed June 30, 2019, shows some concerning results in the Financial Performance Framework, we also know that we are making the right changes over the past few months and that the charter modification will be significant in our future financial viability. One factor that has had a longstanding and major effect on a number of the financial frameworks for the Academy is the Mosiaca Settlement. This debt has been paid in full as of from the local reserves, and will also have a significant impact on the local funds. We have also made direct and concerted efforts to increase our cash flow through both better budgeting as well as increased recruiting efforts.
School Comments 2017-2018	AOD's overall rating was Approaching Standard and we will continue our efforts to meet standard in every financial area in the future. Our gradual increase in student enrollment each year as well as the payment in full of our note payable in FY 2019 will have a positive effect on our financial performance. We are also attempting to control our expenses with major vendors. We negotiated a freeze in our bus contract for a two year period.

b) Describe how the school developed and implemented a corrective action plan in response to audit findings (if applicable)

DOE Summary:
The school's FY20 independent audit did not have any audit findings.

School Comments 2019-2020	No audit findings existed therefore corrective action plan was needed.
School Comments 2018-2019	Not applicable.
School Comments 2017-2018	There was only one prior year finding and this finding was resolved.

V. INNOVATION

School's innovative practice(s) that could be replicated at other schools in Delaware

<p>School Comments 2019-2020</p>	<p>The Academy had a great success with remote learning during the 2019-2020 school year. All students were provided a Chromebook to use from home. The staff organized and developed online teaching quickly after the pandemic occurred. Physical packets of work were also provided to students that wanted to use paper and pencil instead the computer to turn in their work. In some cases, Chromebooks and packets of work were delivered to the students that were unable to get to the school to pick them up. The Academy also procured donations of food from a local butcher shop that was made available to families that wanted it. Again, food was also delivered to families unable to get to the Academy building. In addition, buses traveled routes to deliver school lunches for families to pick up.</p> <p>The Academy has a great process for Response to Intervention (RTI) that proves to be effective. Currently the Academy is using Edmentum for reading RTI and Math. Our schedule allows for a 30-minute block for both Reading and Math RTI during the day in addition to 90 minutes if dedicated time for ELA and 60 minutes for Math. This allows Academy students to spend about 3 hours per day in a small group with the classroom teacher, para, and reading and math interventionists. Progress monitoring is done throughout the year with Edmentum for ELA and Math. Students also complete other benchmark testing weekly or bi-weekly depending on their tier. The interventionists meet with classroom teachers and observe RTI times to ensure that our program is being implemented with fidelity. Staff continue to monitor and analyze data in order to make changes that will enhance the practices in place.</p> <p>There are a number of positive behavior incentives in place to continue the build a culture of caring amongst our students, including the Academy of Leaders, which is demonstrated by or “bow tie boys and “blue ribbon girls.” Some of these students had been on a more negative trajectory, and with positive reinforcement and recognition, have turned around and become student leaders at the Academy.</p>
<p>School Comments 2018-2019</p>	<p>The Academy has a great process for Response to Intervention (RTI) that proves to be effective. Currently, The Academy uses Star Renaissance for reading RTI and Math. Our schedule allows a 30 minute block for both reading and math RTI during the day in addition to 90 minutes of dedicated time for ELA and 60 minutes for Math. This allows Academy students to spend about 3 hours per day in small group with the classroom teacher, para, and if needed, the reading and math interventionists. Progress monitoring is done throughout the year. Students also complete other benchmark testing weekly or bi-weekly depending on their tier. Also, students in math practice on IXL daily for the additional on grade level math practice. The interventionists meet</p>

	<p>with classroom teachers and observe RTI times to ensure that our program is being implemented with fidelity. Staff continue to monitor and analyze data in order to make changes that will enhance the practices in place.</p> <p>There are a number of positive behavior incentives in place to continue to build a culture of caring amongst our students, including the Academy of Leaders, which is demonstrated by our “bow tie boys” and “blue ribbon girls”. Some of these students were on a more negative trajectory, and with positive reinforcement and recognition, have turned around and become Academy leaders.</p>
<p>School Comments 2017-2018</p>	<p>AOD has a great process for Response to Intervention (RTI) that proves to be effective. Currently AOD uses DIBELS for reading RTI and Math Inventory for math RTI. Our schedule allows a 30 minute block for both reading and math RTI during the day in addition to the regular ELA and Math blocks. This allows AOD students to spend about 3 hours per day in small group with the classroom teacher, para, and if needed, the reading and math interventionists. Students are tested 3 times per year in DIBELS and 4 times per year in MI. They also get benchmark testing done in DIBELS either weekly or bi-weekly depending on their tier. Also, students in math practice on IXL daily for the additional math practice at their grade level. The interventionists meet with classroom teachers and observe RTI times to ensure that our program is being implemented with fidelity. Staff continue to monitor and analyze data in order to make changes that will enhance the practices in place.</p>

References:

¹A full copy of 14 *Del. C.* Chapter 5 can be found at: <http://delcode.delaware.gov/title14/c005/>

²Based on September 30th Unit Count

³ Pursuant to the Family Education Rights and Privacy Act (FERPA) (34 CFR §99), the DDOE applies the following statistical methods to avoid disclosure of personally identifiable information in aggregate reporting.

1. For all data, counts for groups or subgroups with 15 or fewer students are suppressed and represented by “-” in data reports. Complementary suppression of one or more non-sensitive cells in a table may be required so that the values of the suppressed cells may not be calculated by subtracting the reported values from the row and column totals.

2. Only report percentages for grade level reporting within a school and district.

3. Percentages are suppressed when the underlying student counts can be derived for groups or subgroups with 15 or fewer students (i.e., if the number tested and proficient are reported, then the percentage may need to be suppressed).

4. Any percentage above 95 or below 5 will be reported as >95% and <5%, respectively.

⁴ US DOE Flexibility Letter can be found at

http://www.doe.k12.de.us/cms/lib09/DE01922744/Centricity/domain/232/esea/DEESEA_Flex_Renewal_Letter_7-9-15.pdf.

⁵Graduation rate data is lag data by one school year to include all students that have completed their high school diplomas during that year including summer graduates.

Renewal Application - September 30, 2021 (Updated)



1. Overview

1.1. Basic Information

Please review the following questions below for accuracy. Please fill in "Current Enrollment" at the time of application submission.

Q1.Name of School

- Academy of Dover
- Other [Please Add Correct Info in the Comment]

Q2.Year School Opened

- 2003
- Other [Please Add Correct Info in the Comment]

Q3.Current Enrollment

- Please fill in "Current Enrollment" at the time of application submission.

Our current enrollment is 375 students.

Applicant Comments :

Our current approved enrollment is 370 students and we have 375 currently enrolled.

Q4.Approved Enrollment

- 412
- Other [Please Add Correct Info in the Comment]

Applicant Comments :

Our current approved enrollment is 370 students. When 8th grade is added this coming year, our approved enrollment will increase to 410 students.

Q5.School Address

- 104 Saulsbury Road, Dover, DE 19904
- Other [Please Add Correct Info in the Comment]

Q6.District(s) of Residence

- Capital School District
- Other [Please Add Correct Info in the Comment]

Q7.Website Address

- <http://www.aodcharter.org/>
- Other [Please Add Correct Info in the Comment]

Q8.Name of School Leader

- Michele Marinucci
- Other [Please Add Correct Info in the Comment]



Q9.School Leader Email

- Michele.Marinucci@aod.k12.de.us
- Other [Please Add Correct Info in the Comment]

Q10.School Leader Phone Number

- (302) 674-0684
- Other [Please Add Correct Info in the Comment]

Q11.Name of Board President

- Kimeu Boynton
- Other [Please Add Correct Info in the Comment]

Q12.Board President Email

- kwboynton@gmail.com
- Other [Please Add Correct Info in the Comment]

Q13.Mission Statement: At the Academy of Dover Charter School each child is a valued and unique individual. The educational process is student-centered and achieved by partnerships involving students, parents, and staff where each child embraces the love, joy, and value of education.

Our Beliefs-

- Each child can develop the confidence, skills, and interests to become lifelong learners.
- Education is student-centered and provides each child with the opportunity to maximize his/her potential by being provided with quality instruction.
- We provide a school that is positive, safe, purposeful, and productive.

- Correct; this is our Mission Statement
- Other [Please Add Correct Info in the Comment]

1.2. Enrollment and Demographics

Q14. Please review the Enrollment & Demographic Information table (see Resources), complete the last column, and upload the revised document.

Upload Required File Type: excel Max File Size: 30 Total Files Count: 1

Resources

Enrollment and Demographic Info Ta...

Applicant Evidence :

EnrollmentandDemographics.xlsx

[Click here](#)

Uploaded on 9/27/2021 by Michele Marinucci

Q15.



School Comments 2019-2020	The school was not required to provide a response to this information.
School Comments 2018-2019	The school was not required to provide a response to this information.
School Comments 2017-2018	The school was not required to provide a response to this information.

Schools are invited but not required to comment on any aspect of the demographic data above in section 1.2.

We utilize the state's School Choice application process and promote the choice application process via social media and as a part of the greater Delaware Charter School Network school choice promotional materials. We also ensure our currently enrolled families know about the enrollment process and we ask them to help spread the word throughout the community.

1.3. Approved Minor and Major Modifications

The table lists any approved minor and/or major modifications over the course of the school's current charter term.

Q16.

Date	Modification Requested	Outcome
4/15/21	Enrollment increase of greater than 15% Grade configuration (added grades 7 and 8)	Approved
2/27/20	Increase the grade configuration from K-5 to K-6 and increase enrollment to 330 students.	Approved

Schools are invited but not required to comment on any aspect of the modification data above in table 1.3.


We are proud to have the opportunity to expand our school to provide additional opportunities to work with our community as a whole. We have have had a great response from, not only parents and families, but also the entire community to our expansion.

1.4. Enrollment Trends

Q17. [Please review the School Enrollment Trends table \(see Resources\), complete the last column \("Current Waitlist for 2021-22"\), and upload the revised document.](#)


Upload Required File Type: excel Max File Size: 30 Total Files Count: 1

Resources



School Enrollment Trends.xlsx

Applicant Evidence :



School Enrollment Trends.xlsx

[Click here](#)

Uploaded on **9/27/2021** by **Michele Marinucci**

Q18.



DOE Summary:

Academy of Dover's enrollment has trended below its approved enrollment for the first three years of its current charter term, at 94%, 91%, and 89%, respectively. However, in school year 20/21, its enrollment improved to 101% of its approved enrollment.

School Comments 2019-2020	The school was not required to provide a response to this information.
School Comments 2018-2019	Describe the school's plans to monitor and minimize attrition rates. Provide information about why students are choosing to enroll in different schools. The Academy of Dover monitors attendance daily through eSchool. Policies are in place to address excessive tardiness and absences. The Academy receives immediate notification of withdrawals and requests the reason for the withdrawal as well as a conference with the parents/guardians. Through this process initiated in fall 2019, we have been able to retain some students who were going to withdraw. Students who have withdrawn have done so due to family relocation, sibling's graduation.
School Comments 2017-2018	The school was not required to provide a response to this information.

Schools are invited but not required to comment on any aspect of the demographic data above in section 1.4.

Since the new Head of School began in August of 2019, a concerted effort has been in place to increase enrollment within the Academy. These efforts have resulted in an increase of enrollment to 102% of approved enrollment during the 21/22 school year with a waiting list for most grades served.

The Academy is proud of the significant turnaround that has occurred over the past three school years. We have gained a significant amount of community, parental, and student support. Our Academy has grown and now has a waiting list.

1.5. Reenrollment Trends

Please review the following table with the school's reenrollment trends during the current term of the charter.

School Reenrollment Trends								
	2017-2018		2018-2019		2019-2020		2020-2021	
	Number of Students Reenrolled Count	Percentage of Students Reenrolled %	Number of Students Reenrolled Count	Percentage of Students Reenrolled %	Number of Students Reenrolled Count	Percentage of Students Reenrolled %	Number of Students Reenrolled Count	Percentage of Students Reenrolled %
K	1		1		1		1	
Grade 1	22	56.41%	48	77.42%	37	78.72%	39	86.67
Grade 2	37	78.72%	26	78.79%	49	81.67%	43	91.49
Grade 3	34	72.34%	33	67.35%	26	76.47%	52	92.86



Grade 4	22	56.41%	38	84.44%	36	81.82%	19	63.33
Grade 5	36	85.71%	27	79.41%	35	79.55%	40	93.02
Grade 6							33	73.33
Grade 7								
Grade 8								
Total Total/Avg	152	71.03%	173	77.58%	184	80.35%	227	85.34%

DOE Summary:
Academy of Dover's reenrollment rate has increased steadily over the course of its current charter term from 71.03% to 84.34%.

Q19.

School Comments 2019-2020	The Academy of Dover monitors attendance daily through eSchool. Policies are in place to address excessive tardiness and absences. The Academy receives immediate notification of withdrawals. Requests are made to conference with parents and guardians to understand the reason for withdrawal. Typical reason for withdraw is family relocation. The Academy had a very high retention rate of returning students. Families have indicated their satisfaction of adding the 6th grade and would like to see the Academy add 7th and 8th grades as well.
School Comments 2018-2019	The Academy of Dover monitors attendance daily through eSchool. Policies are in place to address excessive tardiness and absences. The Academy receives immediate notification of withdrawals and requests the reason for the withdrawal as well as a conference with the parents/guardians. Through this process initiated in fall 2019, we have been able to retain some students who were going to withdraw. Students who have withdrawn have done so due to family relocation, sibling's graduation. rom the 5th grade, or transportation issues. Many families have indicated that they are seeking to continue their children's education within the charter school setting after the 5th grade, causing them to enroll their children in other charter schools that offer higher grades. We have ongoing recruitment efforts and have been engaging social media as well as direct word of mouth campaigns to continue spreading the word to all interested in hearing about our Amazing Academy.
School Comments 2017-2018	Academy of Dover monitors attendance daily through E-School. Policies are put in place to address excessive tardiness and absences. AOD receives immediate notice of student withdrawals and requests the reason for withdrawal on our student withdrawal form. AOD students typically leave due to family re-location, siblings graduating the 5th grade, or transportation issues. Our retention rates are higher among the 4th graders entering 5th grade. Feedback from families indicates that they are looking for alternative placements outside of their home district. Another reason for families leaving is that they get accepted into other charter schools in the area that go from KN to 8th grade. This ensures that the students can remain at one school for a longer period of time. AOD has discussed possibilities of expanding to middle school, however our building is maximized, as far as space. Recruitment committees work within the community to recruit more students for the following school year. With the help of the committee, more students were enrolled for the 2017-18 school year.

Describe the school's plans to monitor and minimize attrition rates. Provide information about why students are choosing to enroll in different schools.



With the additional grades being added, the Academy is seeing more students remain with the Academy each year. We also strongly involve our students in their education. We ask them about things they would like to see added to our academics and electives. By involving our students, we have decided to add sports and also additional related arts classes, such as World Cultures, Music, a Print Shop/Graphic Design class, Theater Arts, and a language learning opportunity.

Whenever a student leaves, the administration attempts to have an exit conversation to identify the reason. In addition, we regularly have conversations with students and families to identify areas of concern and potential for growth. This has resulted in the request to expand to k-8 and to add sports, and other related arts offerings.

The primary reason students leave is to move to a further location out of state or not near the Academy.



2. Academic Performance

Delaware School Success Framework (DSSF)

Delaware operates under the belief that all schools benefit from continuous improvement – including those that receive exceeds expectations ratings – to best support all students. The Delaware School Success Framework (DSSF) (https://education.delaware.gov/wp-content/uploads/2020/02/dssf_one_pager_final.pdf) outlines the accountability standards by which all Delaware public schools are measured. This state- and school-level data helps identify each school's needs and determine how best to support students across the state.

DSSF measures the following areas to determine school success. This annual data is publicly available on the Delaware Report Card (<https://reportcard.doe.k12.de.us/>).

- Academic achievement – Proficiency for ELA and math (grades 3-8 and 11)
- Academic progress – Growth in ELA and math (grades 4-8); includes growth of the lowest and highest performing students in a school
- School quality/student success – On-track attendance (K-12), science proficiency (grades 5, 8 and biology), social studies proficiency (grades 4, 7 and 11), college/career preparedness (grades 9-12), and on-track in 9th grade
- Graduation rates – 4-year, 5-year and 6-year adjusted cohort graduation rates
- English language proficiency (ELP) – Progress toward English language proficiency (grades 1-12)

2.1. Delaware School Success Framework

Q20.Overall Academic Ratings Elementary (grades K-5)/Middle School (grades 6-8)

	2017-2018			2018-2019			2019-2020	2020-2021
Indicator	Points	Points Earned	Percent Points	Points	Points Earned	Percent Points	Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.	Due to the impact of COVID-19 on learning and learning environments, accountability for SY 20/21 has been waived. The school's assessment data for SY20/21 is available at here (https://reportcard.doe.k12.de.us/detail.html#displaypage?scope=school&district=85&school=584&id=212).
Academic Achievement	150.00	68.00	45% Approaching Expectations	150.00	51.00	34% Approaching Expectations		
Academic Progress	200.00	120.00	60% Approaching Expectations	200.00	112.00	56% Meets Expectations		
School Quality/Student Success	50.00	47.00	94% Exceeds Expectations	50.00	45.00	90% Exceeds Expectations		



Progress Toward English Language Proficiency	50.00	38.00	76% Meets Expectations	50.00	33.00	66% Approaching Expectations
Overall	450.00	273.00	61% Approaching Expectations	450.00	241.00	54% Approaching Expectations

DOE Summary:

Starting in SY 17/18, with the implementation of ESSA, each school received an overall rating on the DSSF in addition to ratings for each indicator. AOD earned an "Approaching Expectations" rating in both SY 17/18 and SY 18/19, but academic performance regressed slightly from 61% to 54%.

Based on the table above discuss the school's:

- overall academic achievement results,
- major challenges,
- and accomplishments



<p>School Comments 2019-2020</p>	<p><i>Since all assessment and accountability requirements for SY 19/20 were waived due to the COVID-19 pandemic, schools were asked to describe their performance against their remote learning plans (see below).</i></p> <ul style="list-style-type: none"> • Content Mastery- The Academy used individualized learning plans for each student based on common core standards similar to a standards based report cards to insure parents and teachers had an accurate understand of each student's mastery. Tests and data are examined to chart student success. Intervention is given as necessary to all students whether they attend school remotely or in-person. • Addressing learning gaps (e.g. serving students with disabilities)- , Intervention is given as necessary to all students. Students work in small groups with reading and math specialists as well as with their classroom teacher to insure students receive help in the areas that intervention is needed. • Equity (e.g. measuring and addressing the technology gap, technological literacy)- Our Academy has provided to Chromebooks to each student whether they are remote or in-person learners. For the 2020-2021 school year hot spots have also been made available to all students to assure the ability to learn online at home. Teachers and staff are in touch and available to families to provide technological assistance. • Student engagement- Students attend classes daily via Google Meets. Each teacher holds class and the remote learners are an interactive part of live lessons every day. As stated previously the Academy has provided Chromebooks to every student and in the 2020-2021 school year, hotspots are available to all students to allow internet access. Online learners interact in each lesson. Teachers check for understanding and activity with online throughout each lesson. • Student wellness (e.g. challenges at home)- The Academy has an on-sight counselor. We also have life skills and social skills related arts classes held weekly for all grade levels. These allow for students to discuss and receive assistance for issues they may be having at home or in school. • Assessment and measure of success- Students were given assignment and assessments to complete. They were given options of completing and submitting tasks electronically or by completing a physical packet of assignments. Parents could come to the school to pick up these packets or staff members delivered packets to the students' homes. • Grade level differences- Overall lower grade students had a more difficult time completing or getting online than the upper grade level students. Often lower grade students completed the physical packets of work or worked online after a parent was home from work to assist them. • Lessons learned and improvements for school year 2020-2021 (e.g. preparation, content, synchronous vs asynchronous learning, etc.) The Academy continued to make sure that each student had their own Chromebook to use at home for remote learning and in-person learning. For the 2020-2021 school year hotspots were made available to allow students better internet access for online remote learning.
<p>School Comments 2018-2019</p>	<p>The proficiency scores had a slight decrease from the prior year. The Academy continues to work to increase the rigor and the curriculum across all grades, as well as to enhance the RTI process for Reading and Math. Weekly data reviews occur during the PLCs. Although many students are making gains, it is not yet enough to put them at grade level. AOD is working to close this gap by continuing to implement a more rigorous RTI program for both Reading and Math. Moreover, for both core contents (math and reading), AOD is piloting and planning a full rollout of new curriculum. Engage New York and EL Education are new and expected to support an increase in student achievement. Professional development, teacher coaching, and DOE's CIP Mentoring program are also in place to meet teacher needs. The Academy has a weekly PLC that is focused on student data and curriculum and instruction practices. With the ongoing monitoring and focus on instruction and academic growth, we are confident that the academic success of our students will increase. The beginning of the year assessment data compared with the mid-Marking Period 2 data demonstrates growth in both math and reading for the vast majority of our students. It has also allowed us information to enable us to better target the individual needs of our students.</p>



School Comments 2017-2018	<p>AOD went up in proficiency scores during the 2015-16 and 2016-17 school years. However, in 2017- 18 there was a decrease in the area of Math overall. For ELA, grades 3 and 5 went up from the previous year, with grade 5 exceeding the state average. However, grade 4 showed a decrease in both ELA and Math. Although AOD has the rating of Approaching Expectations, there is still concern as to what led to the decrease in proficiency. While tracking data for a specific group of students, there was an increase in proficiency from grade 3 in 2017 to those same students in grade 4 during the 2018 school year. These students were also very low in RTI during their 2nd grade year and have shown a consistent pattern with being below grade level for the last few years. While those students are making gains, it is not enough to put them at grade level. AOD is working to close this gap by implementing a more rigorous RTI program for both Reading and Math. There has also been an increase in professional development for differentiating instruction. Teachers began taking a deeper look at their student data during PLC's and making plans to help their student's master specific skills. Also, the Enrichment program has increased in participation to about 80% of our 3rd through 5th graders. There are small accomplishments overall with students increasing in scores, however, AOD will continue to work to close the gaps and help our students get closer to meeting their growth targets each year.</p>
----------------------------------	--

The Academy leadership meets with the staff weekly in grade level groups to discuss student achievement and areas of challenge. As a team, we all work cohesively to ensure standards are taught in a sequential manner and that actual learning occurs. If students are struggling, a plan is developed to reteach the standards and ensure the students make the desired academic gains. Regular screening assessments are given that are standards-aligned. Post screening, the data is reviewed and students are grouped accordingly into one of three groups--struggling, on level, and exceeding. Based on the groupings, students are further taught, either with a focus on getting them to level, or getting them beyond level. The Academy continues to monitor and address any learning gaps and provide small group instruction in math and ELA to address these needs. We offered a Summer Academy this past summer, with a focus on both academics and club-like activities. Students loved attending and actually requested we continue it for them. We had over 200 students attend.

Q21.Performance Agreement Academic Performance Expectations [Academy of Dover Charter School's 2018-2019 overall academic ratings are:](#)

- Academic Achievement: Approaching Standard
- Growth: Approaching Standard
- On Track to Graduation: Exceeds Standard
- College and Career: Approaching Standard

[By September 2021, our expectation is to achieve overall ratings of "Meets" or "Exceeds" standard as measured by the Delaware School Success Framework. Each year, we will show growth within our overall rating putting us on track to achieve our academic performance expectations. This progress will be monitored through our annual performance review.](#)

DOE Summary:	
	AOD has earned overall ratings of "Approaching Expectations" in SY 17/18 and SY 18/19. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.

[Discuss the school's academic performance based on its approved Performance Agreement \(see above\).](#)

School Comments 2019-2020	<p>The 2019-2020 school year was the third year of implementation for ESSA. Therefore, some of the categories listed above are not listed on the new ESSA report. Academic Achievement and Academic Progress (Growth) have remained at Approaching Expectations for these last year/s. The overall for 2019-2020 is Approaching Expectations. AOD has taken proper steps to help the students meet their proficiency goals, and to provide support for the teachers to achieve this goal. The Academy remains confident that we will obtain Meets the Standard rating by 2021. The Academy is using the Edmentum program to provide online learning paths for students based on diagnostic tests. In 2020-2021 school year we will be implementing more rigorous curricula via EL Education in ELA and Eureka for Math across all grades. We have a curriculum map and pacing guide in place with structured scheduled conversation and updates during PLCs and staff meetings.</p>
School Comments 2018-2019	<p>The 2018-2019 school year was the second year of implementation for ESSA. Therefore, some of the categories listed above are not listed on the new ESSA report. Academic Achievement and Academic Progress (Growth) have remained at Approaching Expectations for these last year/s. The overall for 2018-2019 is Approaching Expectations. AOD has taken proper steps to help the students meet their proficiency goals, and to provide support for the teachers in order to help make this happen. AOD remains confident that we will obtain the Meets standard rating by 2021.</p>



The COVID pandemic has had an effect on our assessment and accountability data. Although waived by the US Department of Education, the Academy team is maintaining a focus on our students' academic achievement. Although we had a higher percentage of students participate in the SBAC this past spring than the state average, our overall SBAC scores were lower than desired and did not accurately represent the abilities of our students. Our expectation remains that our overall rating will Meet or Exceed the standard as measured by the Delaware School Success Framework. The actual academic progress monitoring is an ongoing and concerted effort within the academy. We have implemented a challenge among grade levels to further motivate our students to show what they actually know and to take the assessments more seriously. With the recently initiated high-quality curriculum, our focus on student mastery of standards and our expectation of high quality instruction, we expect significant gains and much better results on the next state assessment, as well as our overall DSSF ratings in future years.

2.2. Academic Achievement

	2017-2018			2018-2019			2019-2020	2020-2021
Metric	Value	Points	Points Earned	Value	Points	Points Earned		
Proficiency - ELA	50.79%	75.00	38.00	39.53%	75.00	30.00	Due to COVID-19, all SY 19/20 assessment and accountability requirements have been waived by the U.S. Department of Education.	Due to the impact of COVID-19 on learning and learning environments, accountability for SY 20/21 has been waived. The school's SY20/21 assessment data is available here (https://reportcard.doe.k12.de.us/detail.html#displaypage?scope=school&district=85&school=584&id=212).
Proficiency - Math	39.63%	75.00	30.00	28.54%	75.0	21.00		

DOE Summary:

In SY 18/19, AOD earned an "Approaching Expectations" rating for Academic Achievement. ELA proficiency was at 39.53%, a decrease of 11.26% since SY 17/18 and 13.17% less than the State average (52.7%). Math proficiency was at 28.54%, a decrease of 11.09% since SY 17/18 and 13.56% below State average (42.1%).

Q22. Academic Achievement ratings over the course of the charter term

School Comments 2019-2020	<i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i>
School Comments 2018-2019	The school did not provide a response.



<p>School Comments 2017-2018</p>	<p>Based on the proficiency data for both ELA and Math, AOD had a decline overall from the previous year. ELA went from 61% proficient to 51% and Math went from 56% to 40% proficient. However, when looking at disaggregated data, 3rd grade went up 5% in ELA and Math. 5th grade stayed above the state average with a 66% in ELA. There was a drop in our Special Education population overall. One factor was that there was a new Special Ed team during the 2017-18 school year. A lot of efforts were spent making sure the department was in compliance. There was a lack of training in SBAC for the special education team consisting of a full time teacher and a part time paraprofessional. One continuing area of focus is the amount of time that the special education team administers the SBAC to our Special Education students. Due to the amount of Special Ed students needing testing with accommodations, it was hard for the special education teachers to continue working with other students during the testing window. This left more strain on the classroom teachers that are dual certified, to ensure that those students were receiving the proper amount of accommodations and services. AOD feels that this had a negative impact on the scores. The School Success Team is working to come up with a better solution for this problem. Grade 4 proficiency scores decreased in both ELA and Math during the 2017-18 school year as compared to the two years prior. This group of students have had a pattern of staying under grade level as proven by their 2nd grade RTI data, and their 3rd and 4th grade SBAC proficiency data. The end of year DIBELS data showed that in 4th grade, 51% of students were at Benchmark for reading and 54% for SMI math. This was the lowest percentage school wide.(Appendix 1:RTI data chart). While a majority of those students remain under grade level, they are showing individual growth consistently each year.</p>
---	---

Over the last two years we have made significant changes to curriculum. The prior curricula was not up to par and the current is top rated in EdReports. There is a learning curve when new curriculum is added- that with the pandemic did not yield desired results, yet we have seen significant growth in daily work and assessments and expect to see the same in SBAC.

Q23.Expected outcomes for Academic Achievement

<p>School Comments 2019-2020</p>	<p><i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i></p>
<p>School Comments 2018-2019</p>	<p>The Academy continues to work to increase the rigor and the curriculum across all grades, as well as to enhance the RTI process for Reading and Math. Weekly data reviews occur during the PLCs. Although many students are making gains, it is not yet enough to put them at grade level. AOD is working to close this gap by continuing to implement a more rigorous RTI program for both Reading and Math. Moreover, for both core contents (math and reading), AOD is piloting and planning a full rollout of new curriculum. Engage New York and EL Education are new and expected to support an increase in student achievement. Professional development, teacher coaching, and DOE's CIP Mentoring program are also in place to meet teacher needs. The Academy has a weekly PLC that is focused on student data and curriculum and instruction practices. With the ongoing monitoring and focus on instruction and academic growth, we are confident that the academic success of our students will increase. The beginning of the year assessment data compared with the mid-Marking Period 2 data demonstrates growth in both math and reading for the vast majority of our students. It has also allowed us information to enable us to better target the individual needs of our students.</p>



School Comments 2017-2018	<p>Knowing that the decrease in Special Education was a huge concern, AOD has hired another full time Special Education teacher and contracted with an experienced Education Diagnostician. Those staff members attend DOE's Special Education trainings and meet with the DOE Special Resources team to get further support as needed. They also work closely with the Education Diagnostician and attend PLC's within the building with the general education teachers to keep informed of practices within the classroom. There has been some reorganization within our testing grades (3rd_5th) where teachers have been moved around in hopes to help close those gaps. AOD will continue to work with teachers to ensure that RTI is being implemented with fidelity as well as providing support for small group differentiated instruction. AOD is also turning the focus on more writing so that students are better prepared to answer and write constructive responses that meet grade level standard. AOD will continue to implement the Enrichment afterschool program in the Spring. There has been an increase in students participating over the last two years. AOD will continue to work on meeting this standard and increasing our proficiency scores each year.</p>
----------------------------------	--

The Academy continues to work to increase the rigor and the curriculum across all grades, as well as to enhance the RTI process for Reading and Math. Weekly data reviews occur during the PLCs. Although many students are making gains, it is not yet enough to put them at grade level. AOD is working to close this gap and has implemented a more rigorous RTI program for both Reading and Math to supplement the curriculum. Additional Special Education teachers and paraprofessionals have been added to the staff to increase the number of students being reached. Moreover, for both core contents (math and reading), All teachers at the Academy are now using Eureka Math and EL Education with great success. These curricula are highly rated and are high in rigor. The students and teachers have been using this with success and continue to improve. Professional development, teacher coaching, and DOE's CIP Mentoring program are also in place to meet teacher needs. The Academy has a weekly PLC that is focused on student data and curriculum and instruction practices. With the ongoing monitoring and focus on instruction and academic growth, we are confident that the academic success of our students will increase. The beginning of the year Edmentum assessment data has allowed us information to enable us to better target the individual needs of our students.

Q24. Progress measures to track expected Academic Achievement outcomes

School Comments 2019-2020	<i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i>
School Comments 2018-2019	Teachers will continue to meet in PLC to regularly track data in order to establish the best instructional strategies to meet student needs. AOD will also continue to offer support to teachers and make changes to the instructional program where needed. Data such as RTI, formative and summative classroom assessments, and the SBAC will determine if AOD is on track to meet expected outcomes. The Academy Instructional Leadership Team will also work together to track data and reflect on efforts that have a direct link to the Success Plan.
School Comments 2017-2018	Teachers will continue to meet in PLC to track data regularly. This will drive their instruction in the classroom. AOD will also continue to offer support to teachers and make changes to the instructional program where needed. Data such as RTI, informal classroom assessments, and the SBAC will determine if AOD is on track to meeting the expected outcomes. The School Success Team will work to track this data to work towards meeting the goals as reflected on the Success Plan.

Teachers will continue to meet in PLC to regularly track data in order to establish the best instructional strategies to meet student needs. AOD will also continue to offer support to teachers and make changes to the instructional program where needed. Data such as RTI, formative and summative classroom assessments, and the SBAC will determine if AOD is on track to meet expected outcomes. The leadership team will monitor and maintain this data and work to help teachers meet their goals.



Q25. The table above lists the school's available Academic Achievement ratings. Respond to the following questions. a. Based on the school's Academic Achievement ratings over the course of the charter term, discuss the school's current performance and provide explanations/root causes (positive and negative) for the results.

Covid-19 has had an impact on academics. Students and classrooms and even the entire Academy being on quarantine and remote learning for large chunks of time has had impact on our academics. It has now been a few years of dealing with a pandemic. While we have maintained as normal a learning environment as possible, we still realize the effect Covid has had on our Academy.

Q26.b. Looking ahead, what are the school's expected outcomes for Academic Achievement and what steps will the school take to achieve them?

The Academy expects to increase Academic Achievement and recover from the effects of Covid-19 impacts such as quarantines and remote learning. The staff is fully prepared to do increased amount of reteaching and support to make up for the loss of in person time due to Covid. This past year, while most schools were on a modification schedule, we continued to provide Monday - Friday regular schedule of in-person or remote learning for the entire school year.

Q27.c. Describe how the school will measure progress to determine whether the school is on track to meet the school's expected Academic Achievement outcomes.

The Academy will continue to track data obtained during class, RTI, and Edmentum benchmark testing. These results will be discussed during PLC as well as teacher/admin conferences and meetings. Teachers maintain copious records of data and track student progress constantly. The annual SBAC results are also strong measurement used since it allows us to compare our performance to students across the state.

2.3. Academic Progress

	2017-2018			2018-2019			2019-2020			2020-2021		
Metric	Value	Points	Points Earned	Value	Points	Points Earned	Value	Points	Points Earned	Value	Points	Points Earned
Growth - ELA	74.75%	75.00	56.00	66.38%	75.00	50.00	Due to COVID-19, all SY 19/20 assessment and accountability requirements have been waived by the U.S. Department of Education.			Due to the impact of COVID-19 on learning and learning environments, accountability for SY 20/21 has been waived. The school's SY20/21 assessment data is available here (https://reportcard.doe.k12.de.us/detail.html#displaypage?scope=school&district=85&school=584&id=212).		
Growth - Math	73.14%	75.00	55.00	59.96%	75.00	45.00						
Growth of Highest Quartile - ELA	65.87%	12.50	8.00	54.99%	12.50	7.00						
Growth of Highest Quartile - Math	71.60%	12.50	9.00	61.44%	12.50	8.00						
Growth of Lowest Quartile - ELA	84.83%	12.50	11.00	76.43%	12.50	10.00						



Growth of Lowest Quartile - Math	62.76%	12.50	8.00	72.85%	12.50	9.00
----------------------------------	--------	-------	------	--------	-------	------

DOE Summary:

AOD's performance relative to Academic Progress/Growth improved from SY 17/18 to SY 18/19, earning "Approaching Expectations" and "Meets Expectations," respectively. AOD has met or exceeded expectations for Academic Progress. AOD has outperformed State averages in 4 out of 6 metrics as noted below.

English Language Arts – SY 18/19

- 60.22% of AOD students met growth targets in English Language Arts, which was nearly equal to the State average (60.92%). From SY 17/18 to SY 18/19 performance regressed 8.01% from 68.23%.
- 66.13% of AOD students in the highest quartile met growth targets in English Language Arts, which was 3.81% higher than the State average (62.32%). From SY 17/18 to SY 18/19 performance improved 5.18% from 60.95%.
- 55.73% of AOD students in the lowest quartile met growth targets in English Language Arts, which was 6.77% lower than the State average (62.5%). From SY 17/18 to SY 18/19 performance regressed 26.44% from 82.17%.

Math – SY 18/19

- 51.72% of AOD students met growth targets in math, which was 7.38% lower than the State average (59.1%). From SY 17/18 to SY 18/19 performance improved .79% from 50.93%.
- 50.37% of AOD students in the highest quartile met growth targets in math, which was 11.95% lower than the State average (62.32%). From SY 17/18 to SY 18/19 performance regressed 22.45% from 72.82%.
- 52.25% of AOD students in the lowest quartile met growth targets in math, which was 10.25% lower than the State average (62.5%). However, from SY 17/18 to SY 18/19 performance improved 18.37% from 62.76% to 72.85%, respectively.

Q28.School's Academic Progress ratings for all students over the course of the charter term

School Comments 2019-2020	<i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i>
School Comments 2018-2019	Students in grades 4 and 5 take the SBAC each spring. DOE sets a specific growth target for each student based on their previous year SBAC results for reading and math. We are working with our educators to individualize and meet their instructional needs in reading and math on a regular and ongoing basis.



<p>School Comments 2017-2018</p>	<p>Students in grades 4 and 5 take the SBAC each spring. DOE sets a specific growth target for each student based on their previous year SBAC results for reading and math. Where our proficiency rates went down overall in 4th grade, our 5th grade increased in ELA but decreased in Math. In comparison to the state, AO D's growth in ELA was slightly higher than the state but lower than the state in Math. This is consistent with our decrease in math proficiency overall for the 2017-18 school year. In looking at disaggregated data, students are making growth, but not all students are making the amount of growth needed to meet their targets. AOD is looking at how to close these gaps, especially among our lowest quantile including our special education students. The School Success Team met to determine underlying root causes and to develop plans to help close these gaps. Some of the reasons for this gap are 1) AOD had a new special education team, including case manager, teachers, and a para during the 2017-18 school year. We also had more special education students enrolled during the 2017-18 school year than we did in the year prior. 2) A majority of students in grade 4 during the 17-18 school year have been performing below grade level in reading and math as demonstrated in RTI data from their previous grades, as well as SBAC data from 3rd grade. 3) A majority (4/6) of the 3rd_5th grade teachers were in their first three years of teaching. These teachers needed a lot of support and mentoring throughout the school year. Through observations, mentoring program, PLC, professional development, etc. teachers are provided with a lot of support throughout the school year.</p>
---	--

Teachers will continue to meet in PLC to regularly track data in order to establish the best instructional strategies to meet student needs. AOD will also continue to offer support to teachers and make changes to the instructional program where needed. Data such as RTI, formative and summative classroom assessments, Edmentum, and the SBAC will determine if AOD is on track to meet expected outcomes.

Q29.Expected outcomes for Academic Progress for all students

<p>School Comments 2019-2020</p>	<p><i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i></p>
<p>School Comments 2018-2019</p>	<p>We expect that all of our students will make gains academically this year. We have multiple targeted efforts in place to achieve this goal. Our steps to this include our regular monitoring of data, weekly PLCs with ongoing data review, regular classroom instructional walkthroughs, ongoing professional development and coaching sessions with our educators, cross-observations so that our novice educators can observe our more seasoned educators and vice-versa. We have our students reviewing and discussing their individual growth on their reading and math and are empowering them with the strategies to achieve these goals and to love learning at the same time. In addition, we are focusing on continuing to push our students who are achieving at a higher level to grow even further through differentiated instruction and grouping. The Academy Instructional Leadership Team will continue to meet to review school wide data and make plans for closing the gaps. The team recognizes both are areas of strength and weaknesses, and spend a great deal of time focusing on how to make changes to positively affect those areas.</p> <p>The action plan to achieve these outcomes includes, but is not limited to the following:</p> <ul style="list-style-type: none"> *Continue to implement effective instructional strategies in small group reading *Progress monitor targeted students (weekly, bi-weekly or monthly) to use that data to drive instruction and inform RTI instruction and small group placements *Teacher will use PLC time to reflect on instruction, analyze student data and determine instructional needs *Anticipated 21st Century CCLC Grant (Afterschool math and ELA <i>literacy</i> support) *Family engagement *Teachers in grades 3-5 will explicitly work with students in preparation for the state assessments *Instruction will continue to be provided by highly qualified teachers *Utilize paraprofessional support for Math, ELA and Reading RTI *Staff will participate in professional development *Teachers will focus on the writing process across all content areas. <p>In addition to research based instruction and strategies, the action plan will also include increasing opportunities to create a safe, healthy, and nurturing environment for the whole child. One example of this effort will be to increase students social emotional learning and appropriate behavior through utilizing elements of Restorative Practice, students participating in the Academy Leaders including the Bow Tie Boys and Blue Ribbon Girls, PBIS, and our implementation of the Second Step Curriculum, as well as additional student-focused activities to continue to build upon their social-emotional and academic abilities. Next, increasing student attendance rates by daily attendance monitoring, parent communication (i.e. phone calls and letters). We anticipate an increase in student progress by enacting these measures. Furthermore, continuing to foster parent involvement and engagement will be a vital piece to meeting our academic goals. Providing a variety of opportunities for our parents (An Evening at the Academy (formerly AOD night), AOD's Got Talent (formerly our spring AOD night), PTO, open house, parent conferences, PBS events, fundraisers, Special Education Parent Council, etc.) are expected to impact and improve student gains.</p>



<p>School Comments 2017-2018</p>	<p>The School Success Team will continue to meet to look over school wide data and make plans for closing the gaps. Some changes that have occurred for the current school year are 1) reorganization among teachers in grades 3-5 so that there are more experienced teachers in those grades. 2) Teachers work in PLC to dive into their student data and determine methods to help focus on weaker areas in small group. Students spend about 3 hours per day in small groups through reading, math, and RTI. The reading and math interventionists also participate in these PLC's each quarter to not only look at RTI data but to help teachers strategize and come up with alternative plans for their tier 2 and 3 students to help them make gains within RTI. 3) When looking at SBAC data from 2017-18, teachers noticed that writing was a weak area school wide. For the 2018-19 school year, a writing program has been purchased and teachers are focusing a lot on writing across the subjects. This is a big topic in PLC as well. 4) AOD will continue to hold the Enrichment after school program in the Spring. This program runs for about 8 weeks and is organized and planned by the 3rd_5th grade teachers and administrators. The program has increased in participation over the last 2 years and the school expects the program to continue growing. 5) Staff will continue to participate in a number of professional development opportunities throughout the school year. 6) The Instructional Support Team or IST, will continue to meet to monitor RTI data and to make adjustments in the curriculum to help those not making gains in RTI. This team consists of the teachers, special education staff, interventionists, and administrators. AOD staff recognizes the weak areas and spends a great deal of time focusing on how to make changes to positively affect those areas.</p>
---	---

We expect that all of our students will make gains academically this year. We have multiple targeted efforts in place to achieve this goal. Our steps to this include our regular monitoring of data, weekly PLCs with ongoing data review, regular classroom instructional walkthroughs, ongoing professional development and coaching sessions with our educators, cross-observations so that our novice educators can observe our more seasoned educators and vice-versa. We have our students reviewing and discussing their individual growth on their reading and math and are empowering them with the strategies to achieve these goals and to love learning at the same time. In addition, we are focusing on continuing to push our students who are achieving at a higher level to grow even further through differentiated instruction and grouping. The Academy Instructional Leadership Team will continue to meet to review school wide data and make plans for closing the gaps. The team recognizes both are areas of strength and weaknesses, and spend a great deal of time focusing on how to make changes to positively affect those areas.

The action plan to achieve these outcomes includes, but is not limited to the following:

- *We have increased staff support to not only implement effective instructional strategies in small group reading and math but increase it
- *Progress monitor targeted students (weekly, bi-weekly or monthly) to use that data to drive instruction and inform RTI instruction and small group placements
- *Teachers will use PLC time to reflect on instruction, analyze student data and determine instructional needs with the Leadership team each week
- *Teachers in grades 3-7 will explicitly work with students in preparation for the state assessments
- *Instruction will continue to be provided by highly qualified teachers
- *We have increased staff support for Math, ELA and Reading RTI via hiring more General and Special Education teachers and paraprofessionals.
- *Staff participate in professional development targeted at specific areas of need
- *Teachers will continue to focus on strong academic instruction across all content areas. In addition to research based instruction and strategies, the action plan will also include increasing opportunities to create a safe, healthy, and nurturing environment for the whole child. One example of this effort is to increase students social emotional learning and appropriate behavior through utilizing elements of Restorative Practice, students participating in the Academy Leaders including the Bow Tie Boys and Blue Ribbon Girls, PBIS, and our implementation of the Second Step Curriculum, as well as additional student-focused activities to continue to build upon their social-emotional and academic abilities. Next, increasing student attendance rates by daily attendance monitoring, parent communication (i.e. phone calls and letters). We anticipate an increase in student progress by enacting these measures. Furthermore, continuing to foster parent involvement and engagement will be a vital piece to meeting our academic goals. We will continue providing a variety of opportunities for our parents (An Evening at the Academy (formerly AOD night), AOD's Got Talent (formerly our spring AOD night), PTO, open house, parent conferences, PBS events, fundraisers, Special Education Parent Council, etc.) are expected to impact and improve student gains.

Q30. Progress measures to track Academic Progress for all students

<p>School Comments 2019-2020</p>	<p><i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i></p>
---	--



School Comments 2018-2019	Using the Instructional Leadership Team, the school/teachers will track data using Star Renaissance for math and reading and formative/summative instructional assessment measures.
School Comments 2017-2018	Using the School Success Team the school will track data using SMI and DIBELS. Teachers will also track their student data in PLC for any formative assessments done in class. This will help the team determine if the school in on the right track to meeting their expected progress.

All teachers track progress data by using Edmentum testing. This provides benchmark scores to track student progress throughout the year. Teachers also share formative and summative results with leadership team during weekly PLC meetings.

Q31. The table above lists the school's available Academic Progress ratings. Respond to the following questions.

a. Based on the school's Academic Progress ratings for all students over the course of the charter term, discuss the school's current performance and provide at least three explanations/root causes (positive and negative) for the results. (Note: We invite the school to provide information about all students including those below, at and above proficiency.)

The Covid-19 pandemic and the quarantines and remote learning situations that resulted from it have had the biggest impact on our scores.

Student inconsistency during remote learning due to technological issues had an impact on learning and thus the scores.

The curricula that was in place has been replaced by El Education and Eureka Math. These are far more consistent and rigous programs that the staff and students have all expressed are being well received.

Q32.b. Looking ahead, what are the school's expected outcomes for Academic Progress for all students and what steps will the school take to achieve them?

The Academy intends to improve scores via providing RTI and support to students to get them the skills they need to get back on level and beyond. Student progress will be constantly monitored and addressed with teachers and steps taken to ensure the student gets the support that they need.

Q33.c. Describe how the school will measure progress to determine whether the school is on track to meet expected Academic Progress outcomes for all students.

The Academy will monitor student progress regularly. The Edmentum tests will be used as benchmark data through out the year. Additionally, all assessments and data will be discussed with leadership team during PLC. Based on data, students will be grouped in RTI and support groups based on need.

2.4. School Quality/ Student Success

	2017-2018			2018-2019			2019-2020	2020-2021
Metric	Value	Points	Points Earned	Value	Points	Points Earned		
Chronic Absenteeism	90.93%	50.00	45.00	94.75%	50.00	47.00	Due to COVID-19, all SY 19/20 assessment and accountability requirements have been waived by the U.S. Department of Education.	Due to the impact of COVID-19 on learning and learning environments, accountability for SY 20/21 has been waived. The school's SY20/21 assessment data is available here (https://reportcard.doe.k12.de.us/detail.html#displaypage?scope=school&district=85&school=584&id=212).
Proficiency - Science(grades 5 and 8)	n/a	n/a	n/a	n/a	n/a	n/a		
Proficiency - Social Studies(grades 4 and 7)	n/a	n/a	n/a	n/a	n/a	n/a		



DOE Summary:

In SY 18/19, AOD earned a rating of "Exceeds Expectations" for School Quality/Student Success. 93.65% of students demonstrated on-track attendance, which was 6.1% higher than the State average (87.55%). The State assessments for social studies and science were not administered in SY 18/19.

Q34.School's School Quality/ Student Success ratings over the course of charter term

School Comments 2019-2020	<i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i>
School Comments 2018-2019	The Academy of Dover monitors attendance daily through eSchool. Policies are put place to address excessive tardiness and absences in an ongoing effort to keep students in school.
School Comments 2017-2018	Academy of Dover monitors attendance daily through E-School. Policies are put in place to address excessive tardiness and absences in an ongoing effort to keep the students in school. During the 2017-18 school year, there were a couple truancy issues which resulted in taking the families to truancy court. We saw a slight decrease in 2017-18 than we did the previous year due to these truancy issues. One family {2 students} stopped coming to school in January last year and was marked absent through June. This had a huge impact in our attendance rate. Those students have since moved to another state.

The Academy of Dover monitors attendance daily through eSchool. Policies are put place to address excessive tardiness and absences in an ongoing effort to keep students in school. We have implemented the state's science and social studies curriculum and monitor the acquisition of standards through both formal and informal assessments.

Q35.Expected outcomes for School Quality/ Student Success

School Comments 2019-2020	<i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i>
School Comments 2018-2019	Because of our school effort to keep students in school, AOD expects to continue meeting the attendance requirement. Protocols are in place for sending notices to families if their child has a certain amount of tardiness or absences. Once a student gets to 10 days unexcused absence, a referral is made to truancy court. Usually once a parent receives a warning letter, they change the pattern so that their child attends regularly and on time. However, there are occasions when we need to put a more formal process in place.
School Comments 2017-2018	Because of the school's efforts to keep students in school, AOD expects to continue meeting the attendance requirement. Protocols are in place for sending notices to families if their child has a certain amount of tardiness or absences. Once a student gets to 10 days unexcused absence, a referral is made to truancy court. Usually once a parent receives a warning letter, they change the pattern so that their child gets to school on time each day. However, there are times that this does not work and the school has to take further steps.

Because of our school effort to keep students in school, AOD expects to continue meeting the attendance requirement. Protocols are in place for sending notices to families if their child has a certain amount of tardiness or absences. Once a student gets to 10 days unexcused absence, a referral is made to truancy court. Usually once a parent receives a warning letter, they change the pattern so that their child attends regularly and on time. However, there are occasions when we need to put a more formal process in place.

Q36.Progress measures to track School Quality/ Student Success



School Comments 2019-2020	<i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i>
School Comments 2018-2019	The school will continue to track student attendance. Each marking period the school runs a report to see which students are at the point to receive warning letters or attendance hearings. AOD has met this attendance goal for the last several years, and plans to continue monitoring attendance daily and taking the proper procedures to ensure that the students are compliant.
School Comments 2017-2018	The school will continue to track student attendance. Each marking period the school runs a report to see which students are at the mark to receive warning letters or attendance hearings. AOD has met this attendance goal for the last several years and plans to continue monitoring attendance daily and taking the proper procedures to ensure that the students attend school.

The school will continue to track student attendance. Each marking period the school runs a report to see which students are at the point to receive warning letters or attendance hearings. AOD has met this attendance goal for the last several years, and plans to continue monitoring attendance daily and taking the proper procedures to ensure that the students are compliant.

Q37. The table above lists the school's available School Quality/ Student Success ratings. Respond to the following questions.

a. Based on the school's School Quality/ Student Success ratings for all students over the course of the charter term, discuss the school's current performance and provide at least three explanations/root causes (positive and negative) for the results. (Note: We invite the school to provide information about all students including those below, at and above proficiency.)

Covid has affected student success over the course of the pandemic.

An increase in highly qualified staff and support staff will increase student performance.

An increase in parent communication and relationships has helped decrease absenteeism.

We have a Dean of Students added to the school leadership team. This position focuses on climate and culture and addressing the needs of the whole child.

Q38.b. Looking ahead, what are the school's expected outcomes for School Quality/ Student Success for all students and what steps will the school take to achieve them?

By increasing the number of support staff and hiring of highly qualified experienced teachers we believe school quality/student success will continue to improve. We will continue to increase positive relationships with families. Also using restorative practices with students shows an improvement in behavior and social emotion learning within the Academy.

Q39.c. Describe how the school will measure progress to determine whether the school is on track to meet expected School Quality/ Student Success outcomes for all students.

Academy of Dover has an attendance policy that mirrors the State of Delaware policy. Student attendance is paramount to student success. In cases where students are truant, we follow through with reporting and filing truancy with the court system. We are providing in person, remote, and hybrid to meet the needs of the students and families. We have daily attendance tracking and make calls or home visits when attendance issues arise.

2.5. Progress toward English language proficiency (ELP) * new

Beginning in the 2017-2018 school year, every school was measured on student "Progress toward English language proficiency (ELP)" This metric is an index calculation that measures the percentage of all current ELs who make annual progress toward ELP as measured by the statewide ELP assessment. ELP is defined as scoring a PL of 5.0 on the statewide ELP assessment. Attainment has been defined in Delaware as a PL of 5.0 and a level in which a student is considered to have met a proficiency level comparable to their native English speaking peers. **Therefore, a PL of 5.0 is considered a student's Attainment Target (AT).**

	2017-2018			2018-2019			2019-2020	2020-2021
Metric	Value	Points	Points Earned	Value	Points	Points Earned	Due to COVID-19, all SY 19/20 assessment and accountability requirements have been waived by the U.S. Department of Education.	Due to the impact of COVID-19 on learning and learning environments, accountability for SY 20/21 has been waived.
								10/12/2021



Progress Toward English Language Proficiency	76.95%	50.00	38.00	65.04%	50.00	33.00	The school's SY20/21 assessment data is available here (https://reportcard.doe.k12.de.us/detail.html#displaypage?scope=school&district=85&school=584&id=212).
---	--------	-------	-------	--------	-------	-------	---

DOE Summary:

In SY 18/19, 65.04% of AOD English learners demonstrated English language proficiency, which equated to an “Approaching Expectations” rating for this metric. AOD’s performance was slightly less than the State average (66%). From SY 17/18 to SY 18/19 performance regressed 11.91% from 76.95% (“Meets Expectations”) to 65.04%, respectively.

Q40.English language proficiency (ELP) ratings over the course charter term

School Comments 2019-2020	<i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i>
School Comments 2018-2019	AOD has received a Meets Expectation for English Language Proficiency (ELP). The Academy has seen an increase in the ELL population over the past several years. During the 2016-17 SY, there were approximately 11 ELL students, that number tripled during the 2017-18. Since then, The Academy has seen another significant increase of ELL students; our current enrollment show 26 ELL students. AOD contracts with an ELL teacher who works with students each week – in small group. She provides screening to new students entering AOD who have a home language survey that reflects another language spoken in the home. The ELL teacher also administers the ACCESS each Spring. Based on results gathered, AOD is proud of our efforts and accomplishments and the value that our ELL program provides to our students and families.
School Comments 2017-2018	AOD received a Meets Expectation for English language proficiency (ELP). The school has seen an increase in the ELL population over the last 3 years. During the 16-17 school year, there were about 11students in ELL, that number tripled during the 2017-18 school year. AOD contracts with an ELL teacher who works with students each week in small group. She provides screening to new students entering AOD who have a Home language survey that reflects another language spoken in the home. The ELL teacher also administers the ACCESS each spring. Based on the above results, AOD is proud of this accomplishment and the value that our ELL program provides to our students and families.

The Academy of Dover supports students and learning of English through instruction, the ACCESS Testing, regular conversations during PLCs and providing support and building relationships with families. We have increased resources and support and ensure communication is accessible in multiple languages. We have staff that are fluent in the two primary languages spoken by our students and their families other than English. They provide academic and social support to our students and their families.

Q41.Expected outcomes for Progress toward English language proficiency (ELP)

School Comments 2019-2020	<i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i>
School Comments 2018-2019	AOD will continue working towards meeting this expectation. If our numbers continue to increase, we may need to consider additional staff in order to support and provide ELL services.



School Comments 2017-2018	AOD will continue working towards meeting this expectation. If our numbers continue to increase, we may need to look at adding an additional staff member to provide support to those ELL students. The program seems to be effective and we will continue to make sure we are meeting the needs of our ELL population.
----------------------------------	---

The Academy will continue working towards meeting this expectation. If our numbers continue to increase, we may need to consider additional staff in order to support and provide additional ELL services.

Q42. Progress measures to track English language proficiency (ELP) outcomes

School Comments 2019-2020	<i>The school was not required to provide a response. Due to COVID-19, all SY 19/20 assessment and accountability requirements were waived by the U.S. Department of Education.</i>
School Comments 2018-2019	Progress will continue to be measured by the ACCESS test given to students each Spring. The ELL teacher keeps track of the data and works with the students on needed areas/skills.
School Comments 2017-2018	Progress will continue to be measured by the ACCESS test given to students each Spring. The ELL teacher keeps track of the data and works with the students on the areas that each student is lacking in.

Progress will continue to be measured by the ACCESS test given to students each Spring. The ELL teacher keeps track of the data and works with the students on needed areas/skills.

Q43. The table above lists the school's available English language proficiency (ELP) ratings. Respond to the following questions.

a. Based on the school's English language proficiency (ELP) ratings for all students over the course of the charter term, discuss the school's current performance and provide at least three explanations/root causes (positive and negative) for the results. (Note: We invite the school to provide information about all students including those below, at and above proficiency.)

Many English learners are first time school attendees in the United States.

During the pandemic many students had to be remote and missed out due to technology issues at home.

Our curriculum is very rigorous and challenging, so not only is it difficult material, the student is also learning a new language in order to complete the tasks.

Q44.b. Looking ahead, what are the school's expected outcomes for English language proficiency (ELP) for all students and what steps will the school take to achieve them?

Students will achieve adequate growth as English learners to succeed academically as well in the real world. Student progress is monitored by assessment and discussed at PLC with teachers and the Leadership team.

Q45.c. Describe how the school will measure progress to determine whether the school is on track to meet expected English language proficiency (ELP) outcomes for all students.

English learners participate in the annual ACCESS test. Any student who is struggling academically or social/emotionally participates in the MTSS process. The Academy leadership team and PLC meetings both focus on individual students as well as classroom grade level and academy wide progress; thereby individual English learners progress is monitored on a regular basis, allowing adaptations to be made on an as needed level to secure academic success



3. Organizational Performance

The Organizational Performance Framework reflects expectations the charter school is required to meet through state and federal law and the charter performance agreement, and seeks to provide information regarding these key questions:

- Is the school organizationally sound and well operated?
- Is the school fulfilling its legal obligations and sound public stewardship?
- Is the school meeting its obligations and expectations for appropriate access, education, support services, and outcomes for students with disabilities?

3.1. Mission Specific Goal(s)

Is the school faithful to its mission as defined in its current charter, including approved mission-specific academic goals if applicable?

MEETS STANDARD: (WHAT IS THE MISSION SPECIFIC GOAL?)

- One part of AOD's mission is to provide a school that is positive, safe, purposeful, and productive. Therefore, AOD will work to decrease the number of discipline referrals for 2017-18 by 25% when compared to the referral data from the 2016-17 school year.
- During the 19/20 School year, the Academy met the goal of expanding activities and initiatives for the Positive Behavior Support Program in order to provide a more safe and secure school environment. AOD is continuing the process of working towards a "star school" status through PBS.
- We had a total of 71 referrals during the entire 19/20 school year, decreasing from 130 in 16/17, and 90 in 17/18. The data is attached.

DOE Summary:

AOD has earned a "Meets Standard" rating for its mission-specific goal for the past three years of its current charter term.

Q46. Rate the school's performance according to the criteria established by the school for its mission specific goal(s).

School Comments 2019-2020	The Academy met the goal of decreasing the number of discipline referrals.
School Comments 2018-2019	The Academy did meet the mission of decreasing the number of discipline referrals by reducing the number of referrals as obtained by the EdInsight Dashboard report. This is a significant decrease in the number of referrals.
School Comments 2017-2018	The above mission specific goals are from the previous year (2016-17). The 2017-18 goals are attached. The goal was to decrease the number of discipline referrals by 25% or greater when comparing data from 2016-17 school year to 2017-18 school year. AOD had a decrease of 31% in referrals during the 2017-18 school year, which Meets Standard. Data charts are attached to reflect the discipline data. This data was provided to DOE. In FY 2017 there were 130 referrals, which decreased from 235 referrals the previous year. In FY 2018 there were a total of 90 referrals which was a 31% decrease. AOD is on a 3 year trend with meeting this goal.

We have continued to build an incredible culture for the students and staff while focusing on our mission specific goal. The number of discipline referrals continues on a downward trend.

Q47. mission specific goal(s).

School Comments 2018-2019	In 2018-19, 135 out of 141 middle school students (96%) completed at least one trimester of a service learning enrichment class. Many students participate in more than one.
----------------------------------	--



School Comments 2017-2018	In 2017-18, 137 out of 143 middle school students (96%) completed at least one trimester of a service learning enrichment class. Many students participate in more than one.
School Comments 2016-2017	Attached is the gradebook tracking each middle school student and the service learning that they took part in (highlighted in yellow). Names have been redacted.

The Academy of Dover has been working to decrease the number of discipline referrals over time. Our initiative of implementing a Positive Behavior Support Program in order to provide a more safe and secure school environment is well underway.

Q48. Provide as Appendix 1 the results (data source) of the school's mission specific goal(s). Remember not to include any personally identifiable information (PII).

Upload Required File Type: pdf, excel, word Max File Size: 30 Total Files Count: 30

Applicant Comments :

see upload

Applicant Evidence :


Mission Specific Goals.docx

Uploaded on 9/30/2021 by David Hudson

3.2. Organizational Performance

Note: Please utilize the hyperlink in this sentence for more information about the Organizational Performance Framework.

SUMMARY AND OVERALL RATING

Year	Education Program				Governance & Reporting			Students & Staff			OVERALL RATING
	Mission Fidelity	Applicable State & Federal Rqmt	Students with Disabilities	English learners	Governance & Public Stewardship	Oversight of School Mgmt	Reporting Rqmt	Students Rights	Req. on Teacher Cert & Hiring Staff	Facilities, Trans, Health & Safety	
Year	1a	1b	1c	1d	2a	2b	2c	3a	3b	4a	OVERALL RATING
2017-2018	M	M	M	M	M	M	M	M	M	M	Meets Standard
2018-2019	M	M	M	M	M	M	M	M	AS	M	Meets Standard
2019-2020	M	M	M	M	AS	M	M	M	M	M	Meets Standard



2020-2021	M	M	M	M	F	M	M	M	M	M	Meets Standard
-----------	---	---	---	---	---	---	---	---	---	---	----------------

DOE Summary:
AOD earned overall ratings of "Meets Standard" for the past three years of its current charter term. In SY 18/19, the school earned an "Approaching Standard" rating for measure 3b. (Requirements on Teacher Certification and Hiring Staff) In SY 19/20, the school's performance on this measure improved to "Meets Standard." In SY 19/20, the school earned an "Approaching Standard" rating for measure 2a (Governance and Public Stewardship) and earned "Meets Standard" ratings on the other measures.

Q49.School's organizational performance over the current charter term

School Comments 2019-2020	With the exception of one criteria, AOD received Meets the Standards in all areas of the Organizational Framework.
School Comments 2018-2019	With the exception of one criteria, AOD received a Meets Standards in all areas of the Organizational Framework.
School Comments 2017-2018	AOD received a Meets Standard in all areas of the Organizational Framework.

The Academy of Dover is proud of meeting the overall organizational performance framework standards for each year of this charter term. We have a system in place to monitor all areas of the Organizational Framework.

Q50.Changes to organizational practices that the school has implemented to improve the school's organizational outcomes

School Comments 2019-2020	The Academy has made changes and corrections in order to maintain the organizational progress areas that have achieved the ratings of "Meets the Standard", and have taken corrective measures to meet annual progress. For the last several years the Academy has received a Meets Standard in all areas of the Organizational Framework. The Head of School works with the Board to ensure all Board members and CBOC members are properly trained by DOE and works diligently to ensure that all deadlines are adhered to and reports are submitted on time. The school webpage remains up to date and is recognized as Meets the Standard each month for the webpage monitoring by DOE. The Academy continues to provide safe and nurturing environment and remains compliant in the Omnibus School Safety Act.
School Comments 2018-2019	The Academy has made changes and corrections in order to maintain the organizational progress areas that have achieved the ratings of "Meets Standard", and took corrective measures to meet annual progress. The current administration has a commitment to only hiring fully credentialed teachers. For the last several years AOD has received a Meets Standard in all areas of the Organizational Framework. The Head of School works with the Board to ensure that all Board members and CBOC members are properly trained by DOE and works diligently to ensure that all deadlines are adhered to and reports are submitted on time. The school webpage remain up to date and the school receives a Meets Standard each month for the webpage monitoring by DOE. The school continues to provide a safe and nurturing environment and remains compliant in the Omnibus School Safety Act.
School Comments 2017-2018	For the last three years AOD has received a Meets Standard in all areas of the Organizational Framework. The Head of School works with the Board to ensure that all Board members and CBOC members are properly trained by DOE and works diligently to ensure that all deadlines are adhered to and reports are submitted on time. The school webpage remains up to date and the school receives a meets standard each month for the webpage monitoring by DOE. The school continues to provide a safe and nurturing environment and remains compliant in the Omnibus School Safety Act.



The Academy of Dover will continue to review the areas included in the organizational performance framework to ensure compliance and excellence. The Head of School continues to work with the members of the Board and CBOC to ensure they are properly trained in the required areas. The building leadership manages and maintains the Academy website and has a system in place to ensure the data is current and meets the standard. The Academy continues to provide a safe and nurturing environment and remains compliant in the Omnibus School Safety Act.

Q51. Indicator measure where school did not meet standard or is approaching standard

<p>School Comments 2019-2020</p>	<p>2. GOVERNANCE AND REPORTING</p> <p>Measure 2a.</p> <p>Is the school fulfilling essential governance and public stewardship responsibilities?</p> <p>School Response To Rating:</p> <p>We are monitoring all regulations code and requirement to insure that we meet the standards in all areas</p>
<p>School Comments 2018-2019</p>	<p>School comments for SY 2018-2019 can be found at: https://www.doe.k12.de.us/Page/2654 (https://www.doe.k12.de.us/Page/2654)</p>
<p>School Comments 2017-2018</p>	<p>School comments for SY 2017-2018 can be found at: https://www.doe.k12.de.us/Page/2654 (https://www.doe.k12.de.us/Page/2654)</p>

One former member of the board did not complete a required training. The Academy leadership is now monitoring and ensuring all requirements are met in a timely manner.

Q52. Describe the school's organizational performance over the current charter term. (This section is for the school to address any overall rating where the school has not met standards. The school will be able to address individual metrics in the sections below.)

One former member of the board did not complete a training. The Academy leadership is now monitoring and ensuring all requirements are met in a timely manner.

Q53. Identify changes to organizational practices that the school has implemented to improve the school's organizational outcomes.

The Academy has an internal process of reviewing and monitoring organizational performance framework metrics to ensure compliance and best practice.

Q54. Address any measure where school did not meet standard or is approaching standard.

One former member of the board did not complete a training. The Academy leadership is now monitoring and ensuring all requirements are met in a timely manner.

Q55. Performance Agreement Organizational Performance Expectations [Academy of Dover Charter School's 2017-18 overall organizational rating is Meets Standard. By September 2021, our expectation is to achieve the overall rating of "Meets, as measured by the Organizational Performance Framework. Each year, we will be on track to demonstrate performance aligned with those organizational performance expectations. This progress will be monitored through our annual performance review.](#)

<p>DOE Summary:</p>
<p>Academy of Dover as earned overall ratings of "Meets Standard" for the past three years of its current charter term.</p>

<p>School Comments 2019-2020</p>	<p>For the last several years AOD has received a Meets Standard on all measures in the Organizational Framework. The Head of School works diligently to ensure that the school meets the criteria established in this agreement, and will continue to work hard to ensure that the Academy achieves high rating.</p>
---	--



School Comments 2018-2019	For the last several years AOD has received a Meets Standard on all measures in the Organizational Framework. The Head of School works diligently to ensure that the school meets the criteria established in this agreement, and will continue to work hard to ensure that The Academy remains at that rating.
School Comments 2017-2018	For the last three years AOD has received a Meets Standard on all measures in the Org. Framework. The Head of School works diligently to ensure that the school meets the criteria established in this agreement, and will continue to work hard to ensure that school remains at that same rating for years to come.

Discuss the school's organizational performance based on its approved Performance Agreement.

The Head of School and the Leadership Team, work diligently to ensure that the school meets the criteria established in this agreement, and will continue to work hard to ensure that the Academy achieves high rating.

3.3. Educational Program

Q56. Describe any changes to the education program or curricula the Board plans to make prior to the renewal.

Two years ago we adopted EL Education as our ELA curriculum and Eureka math as our Math curriculum. These curricular adoptions were made upon discussion and consultation with the staff at the Academy and the curriculum department and leadership at the Department of Education. The prior curriculum was not at a level of quality that was desired, and therefore, the Academy leadership team collaborated with the staff and DOE team to identify and then implement curriculum that was rated highly in the EDReports rating system. The educational program and curriculum were approved during the charter modification process held last year. All changes received the approval of Department of Education. Additionally, as part of the charter renewal process, the Academy pre-submitted the curricula portion to the Department of Education for review.

Q57. As appendices, provide the following documents as evidence of curriculum alignment to Delaware Content Standards: Appendix 2 Provide an electronic copy of curricula including scope and sequence documents, units, assessments and content covered per core content area (Mathematics, English Language Arts, Social Studies, Science, Visual/Performing Arts, World Languages) for each grade level the school serves. The documents should demonstrate clear alignment with the Delaware Content Standards (including Common Core State Standards in English Language Arts and Mathematics, and Next Generation Science Standards) in all content areas. Evidence to establish adherence to the state's expectations regarding ELA standards and instruction through the grade bands should include the following:

- Evidence of the adoption of a high quality instructional resources as defined by EdReports.org., which includes the scope and sequence documents showing units of study with their corresponding anchor texts and culminating tasks with the intended pacing for each grade/course; **OR** curricular resources/documents that meet the criteria of the appropriate IMET from achievethecore.org, including additional resources selected to support areas where the curriculum materials were weak per EdReports.org (yellow or red). Scope and sequence documents must include:
 - featured anchor texts of knowledge building units around topics of inquiry/exploration and intended pacing for each grade/course. These should reflect the distribution of text types and genres required by the standards as outlined in Appendix B.
 - a set of targeted grade-level CCSS ELA/Literacy standards for each unit.
 - alignment to the foundational reading skills and intended pacing for each grade must be included for grades K-5.
- Sample learning experiences (lesson/unit) and assessments with their corresponding rubrics.
- Opportunities provided and embedded within curriculum for professional learning and strategic use of curricular resources.
- In addition, there needs to be a well-articulated academic MTSS process for reading that includes screening, diagnostics, evidence-based interventions, and progress monitoring.
- For grades 9-12, English course sequences/programs of study should be provided. No curricular documents are required for Advanced Placement, International Baccalaureate SL or HL, or dual enrollment courses.

Evidence to establish adherence to the state's expectations regarding Math standards and instruction through the grade bands should include the following:

- Evidence of the adoption of a high quality, standards aligned instructional resource as defined by EdReports.org. This includes the scope and sequence documents showing alignment to standards and intended pacing for each grade/course; **OR** curricular resources/documents that meet the criteria of the appropriate IMET from achievethecore.org including additional resources selected to support areas where the curriculum materials were weak per EdReports.org (yellow or red). Scope and sequence documents showing alignment to standards and intended pacing for each grade/course must be included in this documentation.
- Sample learning experiences (lesson/unit) and assessments
- Opportunities provided and embedded within the curriculum for professional learning and strategic use of curricular resources.
- In addition, there needs to be a well-articulated academic MTSS process for mathematics that includes screening, diagnostics, evidence-based interventions, and progress monitoring.



- Additionally, for grades 9-12, Mathematics course sequences/programs of study should be provided. No curricular documents are required for Advanced Placement, International Baccalaureate SL or HL, or dual enrollment courses.

Evidence to establish adherence to the state's expectations regarding Social Studies standards and instruction through the grade bands should include the following:

- Scope and sequence showing standards targeted and major topics for each grade/course in the school.
- One sample assessment aligned to state standards – intended to provide evidence of student achievement of standards - for each grade/course in the school.
- No curricular documents are required for AP, IB, or dual enrollment courses.
- Schedule of time allotted for social studies instruction in each grade

Evidence to establish adherence to the state's expectations regarding Science standards and instruction through the grade bands should include the following:

- Evidence of the adoption of a high-quality instructional resource as defined by EdReports.org or curricular resources that meet the criteria of the EQulP rubric from nextgenscience.org, reviewed by an external evaluator that is not the materials publisher.
- The LEA must provide a scope and sequence for each grade level that includes the unit topic, the unit phenomenon, standards that are covered in that unit, what the students do and figuring out in the unit, and include a lesson and sample assessment from K-2, 3-5, 6-8, 9-12, depending on the structure of the school.
- Schedule of time allotted for science instruction in each grade
- A Response to the following questions:
 - What is the professional development plan to support continuous three-dimensional learning along with your instructional resources?
 - Describe how you ensure accessibility for all students in science.
 - Describe how your administrators are monitoring science instruction to ensure the shifts in science are occurring.

Evidence to establish adherence to the state's expectations regarding Visual/ Performing Arts standards and instruction through the grade bands should include the following:

- Scope and sequence showing National Core Arts Standards/Delaware State Standards targeted and major topics for each grade/course in the school.
- One sample assessment and rubrics aligned to state (NCAS) standards – intended to provide evidence of student achievement of standards - for each grade/course in the school.
- Schedule of time allotted for arts instruction in each grade band.
- No curricular documents are required for AP, IB.








Evidence to establish adherence to the state's expectations regarding World Languages standards and instruction in grades 9-12 should include the following:

- Curriculum map or scope and sequence showing the targeted Delaware World-Ready Standards for Learning Languages, state proficiency targets and major learning contexts (themes) for each level of language instruction.
- One sample assessment and accompanying scoring rubric from one learning context--intended to provide evidence of student growth in proficiency--for each level of language instruction.

No curricular documents are required for AP, IB.

Upload Required File Type: pdf, image, excel, word, text Max File Size: 30 Total Files Count: 100

Applicant Evidence :

 Charter Renewal MUSIC SCOPE AND ...	 Charter Renewal VISUAL ARTS SCOPE...	 FINAL Math K-8 Academy of Dover ch...	 AOD_Social Studies Renewal Doc.pdf
Uploaded on 9/30/2021 by David Hudson	Uploaded on 9/30/2021 by David Hudson	Uploaded on 9/29/2021 by David Hudson	Uploaded on 9/29/2021 by David Hudson
 Science K-8 AOD Renewal.docx	 EL Education.zip	 Eureka Math Curriculum Overview Pr...	
Uploaded on 9/29/2021 by David Hudson	Uploaded on 9/29/2021 by David Hudson	Uploaded on 9/29/2021 by David Hudson	

3.4. At-risk students, Students with Disabilities, and English Language Learners



Year	Education Program		
	Applicable State & Federal Requirements	Students with Disabilities	English learners
	1b	1c	1d
2017-2018	M	M	M
2018-2019	M	M	M
2019-2020	M	M	M
2020-2021	M	M	M

*Data is an excerpt from the overall Organizational Performance Framework data included in section 3.2.

Q58.If applicable, describe any changes or enhancements the school has made based on findings from audits, investigations, or other administrative proceedings related to at-risk students, students with disabilities, or English Language Learners.

The Academy of Dover Charter School has looked at the number of at-risks students, students with disabilities, and English Language Learners and have added additional support for all areas. The Academy of Dover Charter school has added an additional Special Education teacher and paraprofessionals to help support those students who are at-risk or are students with disabilities. The Academy of Dover Charter School has added additional language support for the English Language Learners during the morning routine. For those students who are at risk we have added support in ways of counseling and peer groups. We have changed the way the school disciplines students by not sending them home, but by talking through their behaviors and helping them correct the area of concern or encourage them to work on that area. All students are treated equally no matter their skin color or economic status. Each child is supported in the way that they need

Q59.Describe any changes or enhancements to the process by which at-risk students are identified and the evidence that the school was able to provide the right resources and services for these students.

The Academy of Dover Charter School quickly identified those students who were at risk by looking at classroom and school behavior and quickly took action. Those students were mentored by the Dean of Students and were placed into a leadership group. Those that did well became a bow tie boy or blue ribbon girl and became a leader within their grade and a representation of what a leader is to those in younger grades.

Applicant Comments :

The Academy of Dover Charter School quickly identified those students who were at risk by looking at classroom and school behavior and quickly took action. Those students were mentored by the Dean of Students and were placed into a leadership group. Those that did well became a bow tie boy or blue ribbon girl and became a leader within their grade and a representation of what a leader is to those in younger grades. We have also added a therapeutic counseling program by partnering with a local agency. A certified mental health counselor, therapist, and a social worker all area the the Academy working with identified students and their families each week.



Q60. Describe any changes or enhancements to the process by which English Language Learners are identified and the evidence that the school was able to provide the right resources and services for these students.

The Academy of Dover Charter School did not make any changes at this time. AOD continues to use ACCESS testing to evaluate students need areas. Then supports are provided by an outside ELL teacher who collects the data.

Applicant Comments :

The Academy of Dover Charter School did not make any changes at this time. AOD continues to use ACCESS testing to evaluate students need areas. Then supports are provided by an outside ELL teacher who collects the data.

Q61. Describe any changes or enhancements to the process by which students with disabilities are identified and the evidence that the school was able to provide the right resources and services for these students.

The Academy of Dover Charter School did not change the process at this time. However, with the number of students with disabilities growing at the Academy of Dover, an additional Special Education teacher and additional paraprofessionals were hired. The school continues to use outside agencies to provide services in the area Speech and Language, Occupational Therapy, and Physical Therapy. AOD continues to keep communication with teacher and families strong and listen to when a parent has a concern and are quick to communicate if a teacher has a concern about a child. Parents are contacted about academic concerns before Special Education services are mentioned. If no progress has been made after that conversation, then an evaluation is suggested for the student, and if the parent agrees, AOD moves forward in that process.

Applicant Comments :

The Academy of Dover Charter School did not change the process at this time. However, with the number of students with disabilities growing at the Academy of Dover, an additional Special Education teacher and additional paraprofessionals were hired. The school continues to use outside agencies to provide services in the area Speech and Language, Occupational Therapy, and Physical Therapy. AOD continues to keep communication with teacher and families strong and listen to when a parent has a concern and are quick to communicate if a teacher has a concern about a child. Parents are contacted about academic concerns before Special Education services are mentioned. If no progress has been made after that conversation, then an evaluation is suggested for the student, and if the parent agrees, AOD moves forward in that process.

3.5. Governance and Reporting Requirements

Year	Governance & Reporting		
	Governance & Public Stewardship	Oversight of School Management	Reporting Requirements
	2a	2b	2c
2017-2018	M	M	M
2018-2019	M	M	M
2019-2020	AS	M	M
2020-2021	AS	M	M

*Data is an excerpt from the overall Organizational Performance Framework data included in section 3.2.

* Measure 2: Financial Management and Oversight was moved to the Financial Performance Framework beginning in school year 2016-17



Q62. Provide information regarding how the Board of Trustees effectively evaluates the School Leader(s), including any policies or procedures related to such evaluation(s).

The Academy of Dover's Board of Directors provides an annual evaluation of the Head of School. The DPAS II framework is used for this evaluation. The metrics used align with those of a successful operation of educational learning locations. Encompassed in the evaluation process is the academic, organizational, and financial performance metric

Applicant Comments :

The Academy of Dover's Board of Directors provides an annual evaluation of the Head of School. The DPAS II framework is used for this evaluation. The metrics used align with those of a successful operation of educational learning locations. Encompassed in the evaluation process is the academic, organizational, and financial performance metric

Q63. Provide information regarding how the Board of Trustees effectively evaluates its own success. Include examples of any corrective actions, if applicable, the Board of Trustees implemented as a result of its evaluation.

The Academy of Dover Board of Directors has a clear understanding of their roles and responsibilities. The Board members remain current on the happening at the Academy to include the academic, organizational, and financial performance.

Applicant Comments :

The Academy of Dover Board of Directors has a clear understanding of their roles and responsibilities. The Board members remain current on the happening at the Academy to include the academic, organizational, and financial performance.

Q64. Identify the school's plan to ensure the effectiveness of its Board of Trustees, including governance training and new member induction.

Any new members of the Board of Trustess participates in the financial oversight training provided by the Department of Education and also participates in the formal board governance training.

Applicant Comments :

Any new members of the Board of Trustess participates in the financial oversight training provided by the Department of Education and also participates in the formal board governance training.

Q65. Describe the school's process for succession planning including identification, development and retention of school leaders.

The Academy of Dover has enhanced its current organizational structure to allow for added leadership positions within the Academy that all report directly to the Head of School and report to the Board throughout the year. This enhanced leadership team includes the Assistant Head of School/Curriculum Director, Dean of Students/School Climate, Supervisor of Student Supports/Special Education. In addition, we have developed lead teacher positions for Related Arts as well as for Academics. The leadership team meets weekly on Monday mornings to provide team updates, discuss instructional, social/emotional, behavioral, as well as overall management areas of the Academy. Every Wednesday, through the academic year, this team meets with each grade level teaching team as well as with the related arts team to discuss overall instructional and social/emotional strengths and areas of concern at broad grade-level, classroom level, and individual student level. Professional growth is also included based on individual grade level needs during the weekly PLCs. The Academy also holds regular Academy-wide staff professional development sessions to ensure the full collaboration model is maintained across the entire Academy.

Applicant Comments :

The Academy of Dover has enhanced its current organizational structure to allow for added leadership positions within the Academy that all report directly to the Head of School and report to the Board throughout the year. This enhanced leadership team includes the Assistant Head of School/Curriculum Director, Dean of Students/School Climate, Supervisor of Student Supports/Special Education. In addition, we have developed lead teacher positions for Related Arts as well as for Academics. The leadership team meets weekly on Monday mornings to provide team updates, discuss instructional, social/emotional, behavioral, as well as overall management areas of the Academy. Every Wednesday, through the academic year, this team meets with each grade level teaching team as well as with the related arts team to discuss overall instructional and social/emotional strengths and areas of concern at broad grade-level, classroom level, and individual student level. Professional growth is also included based on individual grade level needs during the weekly PLCs. The Academy also holds regular Academy-wide staff professional development sessions to ensure the full collaboration model is maintained across the entire Academy.

Q66. Share how the Board supports the school. Speak to the Board's involvement in events, operations, and fundraising activities.

The Academy of Dover's Board of Directors has a clear understanding of their roles and responsibilities. The Board has played a vital role in supporting the new Head of School since she started in August of 2019. Members are present at the Academy on a regular basis including dropping off their children at Academy, attending Academy events, visiting the Academy, attending committee and Board meetings, and truly participating in the Academy as a whole.



Applicant Comments :

The Academy of Dover's Board of Directors has a clear understanding of their roles and responsibilities. The Board has played a vital role in supporting the new Head of School since she started in August of 2019. Members are present at the Academy on a regular basis including dropping off their children at Academy, attending Academy events, visiting the Academy, attending committee and Board meetings, and truly participating in the Academy as a whole.


Q67. Appendix 3: Current Organizational Chart

Upload Required File Type: pdf, image, excel, word Max File Size: 30 Total Files Count: 10

Applicant Comments :

The Current Organizational Chart is uploaded.

Applicant Evidence :


OrgChartSY21.22.pdf

Uploaded on **9/28/2021** by **Michele Marinucci**

Q68. Please complete the Board Financial and Governance table (see Resources) with the necessary information.


- In accordance with Del. 14 §512 (15), the school shall have a satisfactory plan to ensure the effectiveness of its board of trustees, including governance trainings conducted for any new board members and at a minimum of once every 3 years.
- Please list only the most recent training date.

Upload Required File Type: excel Max File Size: 30 Total Files Count: 1


Applicant Comments :

The current Board Financial and Governance Training table is uploaded.

Resources


Board Financial and Governance Trai...

Applicant Evidence :


Board Financial and Governance Trai...

Uploaded on **9/30/2021** by **Michele Marinucci**

[Click here](#)

Q69. Board Financial and Governance Members and Training (review the file you uploaded above)

DOE Summary:
As of May 1, 2021, Academy of Dover's Board of Directors was not in compliance with the State's membership and board governance training requirements. One board member, Beverly Williams, has not completed the board financial training. Three board members (Candace Holmes, Esosa Irowen, and Teresa Tridente, have not completed the board governance training.

School Comments 2019-2020	School did not provide a response
----------------------------------	-----------------------------------



School Comments 2018-2019	School did not provide a response
School Comments 2017-2018	At the end of the 2017-18 school year, AOD's board gained a new Treasurer and a new Parent Representative. The members listed above were active for the 2017-18 school year. Each of the board members have been trained in the Finance training, and in August 2018, the Board and Head of School attended the DANA training for Board Governance. {Appendix 3: Certificates of the current members trained).

Note: This data element was included in SY 16/17 for direct school reporting. School information regarding the performance agreement for SY 16/17 and SY 17/18 can be found in their overall annual report at <https://www.doe.k12.de.us/Page/2654> (<https://www.doe.k12.de.us/Page/2654>)

The Board of Directors is committed to being in compliance with the State's membership and board governance training requirements. Beverly Williams was a former board member who resigned and is no longer on the board. The Board Governance training has been completed by all but one board members--that training is in the process of occurring. Esosa Irowen and the newest board member, Ashley Murphy, as well as Lauren Comegys all participated in the Board Governance Training. Teresa Tridente is no longer a board member. David Hudson and Ashley Murphy are new members to CBOC (and Ms. Murphy is new to the Board) and just completed the financial training since the session was recently released; their certificates have not been received as of the date of this submission.

Applicant Comments :

The Board of Directors is committed to being in compliance with the State's membership and board governance training requirements. Beverly Williams was a former board member who resigned and is no longer on the board. The Board Governance training has been completed by all but one board members--that training is in the process of occurring. Esosa Irowen and the newest board member, Ashley Murphy, as well as Lauren Comegys all participated in the Board Governance Training. Teresa Tridente is no longer a board member. David Hudson and Ashley Murphy are new members to CBOC (and Ms. Murphy is new to the Board) and just completed the financial training since the session was recently released; their certificates have not been received as of the date of this submission.


Q70. Please complete the Citizen Budget Oversight Committee Membership and Training table (see Resources) and upload your finished copy here.

Upload Required File Type: excel Max File Size: 30 Total Files Count: 1

Applicant Comments :


The current Citizen Budget Oversight Membership and Training table is uploaded.

Resources



Citizen Budget Oversight Committee ...

Applicant Evidence :



CBOCBoard Financial and Governanc...

Click here

Uploaded on **9/30/2021** by **Michele Marinucci**

Q71. Citizen Budget Oversight Committee Membership & Trainings (review the file you uploaded above)

DOE Summary:
As of May 1, 2021, Academy of Dover's Citizens Budget Oversight Committee (CBOC) was in compliance with State's membership and financial training requirements.

School Comments 2019-2020	School did not provide a response
----------------------------------	-----------------------------------



School Comments 2018-2019	School did not provide a response
School Comments 2017-2018	At the end of the 2017-18 school year, AOD's Treasurer, teacher representative and community member all resigned. The school fulfilled the Treasurer and teacher representative vacancies. There was also a new Parent Representative added. Currently all CBOC members are trained by DOE in finance. AOD is currently looking for a new community member to add to the committee, and as of Jan 2019 will be looking for a new Parent Rep as well.

Note: This data element was included in SY 16/17 for direct school reporting. School information regarding the performance agreement for SY 16/17 and SY 17/18 can be found in their overall annual report at <https://www.doe.k12.de.us/Page/2654> (<https://www.doe.k12.de.us/Page/2654>)

The Academy of Dover's CBOC is in compliance with requirements.

Applicant Comments :

The Academy of Dover's CBOC is in compliance with requirements.


Q72. Appendix 4: Board Governance Training Certificates and/or Documentation

Upload Required File Type: pdf, image, excel, word, text Max File Size: 30 Total Files Count: 50

Applicant Comments :


The Board Governance Training Certificates and Documentation are included.

Applicant Evidence :




Marinucci M.pdf

Uploaded on **9/29/2021** by **Michele Marinucci**




Holmes C.pdf

Uploaded on **9/29/2021** by **Michele Marinucci**



BoardTrainingCertificates.pdf

Uploaded on **9/29/2021** by **Michele Marinucci**



Thomas Wfinancial training certificat...

Uploaded on **9/28/2021** by **Michele Marinucci**



AOD Training August 2021.pdf

Uploaded on **9/28/2021** by **Michele Marinucci**

Q73. Appendix 5: Board member and school leader succession plans

Upload Required File Type: pdf, image, excel, word, text Max File Size: 30 Total Files Count: 10

Applicant Comments :

The Academy of Dover has updated its organizational structure to include additional leadership positions that report directly to the Head of School. The Academy leadership now includes an Assistant Head of School, a Deputy Principal Assisitant, a Dean of Students, a Supervisor of Student Supports and a Financial Specialist. This team works collaboratively to ensure the Academy's operations and academic supports are of high quality.

Applicant Evidence :



OrgChartSY21.22.pdf

Uploaded on **9/30/2021** by **Michele Marinucci**

Q74. Appendix 6: Current board bylaws

Upload Required File Type: pdf, excel, word Max File Size: 30 Total Files Count: 10

Applicant Comments :

The current Bylaws are uploaded. A review of the bylaws is being done by the Academy leadership to identify any ongoing areas needing attention.



Applicant Evidence :


ByLaws.pdf

Uploaded on 9/30/2021 by Michele Marinucci

3.6. Students, Employees and School Environment

Year	Students & Staff		
	Students Rights	Req. on Teacher Certification & Hiring Staff	Facilities, Transportation, Health & Safety
	3a	3b	4a
2017-2018	M	M	M
2018-2019	M	AS	M
2019-2020	M	M	M
2020-2021	M	M	M

*Data is an excerpt from the overall Organizational Performance Framework data included in section 3.2.

Q75. Provide information about any metric where the school did not meet standards including how the school addressed this deficiency.

In the 2018-2019 school year, our school didn't meet standards because there were two employees that weren't properly certified for their job. To address this issue, our school has implemented a protocol during the hiring process to check that employees are adequately certified for their position within the school.

Q76. Provide information about the best practices the school uses to meet standards in the above noted areas.

The best practices that our school uses to meet the standards in Students Rights are to accept School Choice applications in a lottery system. The students that are the exception to this practice are children of Board members, children of staff members, and children with siblings already enrolled. The Academy also ensures that students are aware of the student code of conduct and their rights. The best practices that our school uses to meet the standards in requirements on Teacher Certifications and Hiring Staff are during the hiring process, we check that potential employees are adequately certified for their position within the school. We also ensure that their data is correct within the DEEDS system. If teachers have their Initial Licenses, we ensure that they participate in the Comprehensive Induction Program. Some of the best practices that our school uses to meet the standards in Facilities, Transportation, Health & Safety are disinfecting classrooms and hallways with a disinfectant spray fogger twice during the school day, as well as having students not gathering in large groups to combat sicknesses. The best practices our school uses in Transportation are we act as full partners with our school contractors. We have bus routes set up strategically based on student needs. We also have established protocols for the car riders for families, so that the car rider line moves efficiently and effectively. Through all areas of the above noted areas, best practices are followed and researched to ensure we are operating in accordance with the best practices.

Q77. Appendix 7: Please upload an up-to-date Certificate of Occupancy


Upload Required File Type: pdf, image, excel, word, text Max File Size: 30 Total Files Count: 10



Applicant Comments :

see uploaded

Applicant Evidence :


CertificateofOccupancy.pdf

Uploaded on **9/28/2021** by **Michele Marinucci**


Q78.Appendix 8: Please upload an up-to-date Fire Inspection Certificate

Upload Required File Type: pdf, image, excel, word, text Max File Size: 30 Total Files Count: 10

Applicant Comments :

see uploaded

Applicant Evidence :



Fw_ Annual Fire and Life Safety Inspe...

Uploaded on **9/28/2021** by **Michele Marinucci**

Q79.Appendix 9: Please upload an up-to-date Insurance Certificate(s)

Upload Required File Type: pdf, image, excel, word, text Max File Size: 30 Total Files Count: 10


Applicant Evidence :


Endt to Add SLEO.pdf

Uploaded on **9/28/2021** by **Michele Marinucci**


Auto.PDF

Uploaded on **9/28/2021** by **Michele Marinucci**


Umbrella.pdf

Uploaded on **9/28/2021** by **Michele Marinucci**


Package.pdf

Uploaded on **9/28/2021** by **Michele Marinucci**


Q80.Appendix 10 ERIP: Please upload report for SY19/20 and SY20/21

Upload Required File Type: pdf, image, excel, word, text Max File Size: 30 Total Files Count: 10

Applicant Comments :

The ERIP system is changing over to a new platform. We worked with the ERIP team to acquire the requested documentation.

Applicant Evidence :


ERIP.pdf

Uploaded on **9/29/2021** by **Michele Marinucci**

3.7. Teacher Retention

2017-2018	2018-2019	2019-2020
-----------	-----------	-----------



% of Teachers RETAINED	# of Teachers RETAINED	# of Teachers ELIGIBLE	% of Teachers RETAINED	# of Teachers RETAINED	# of Teachers ELIGIBLE	% of Teachers RETAINED	# of Teachers RETAINED	# of Teachers ELIGIBLE
68.7%	11	16	72%	13	18	45%	9	20

DOE Summary:

Over the course of the charter term, Academy of Dover's teacher retention rate decreased from 68.7% to 45%. However, from SY 17/18 to SY 18/19, the teacher retention rate increased slightly from 68.7% to 72%. From SY 18/19 to SY 19/20 the rate decreased 27%, from 72% to 45%.

Q81.2020-2021 PERCENT of Teachers RETAINED

The percent of teachers retained in 2020 - 2021 school year was 90%.

Q82.2020-2021 NUMBER of Teachers RETAINED

During the school year 2020-2021, 18 teachers were retained.

Q83.2020-2021 NUMBER of Teachers ELIGIBLE

During the school year 2020-2021 there were 20 full time teachers.

Q84.School's plans to monitor and minimize teacher attrition rates

School Comments 2019-2020	At the beginning of the 2019-2020 school year, the Academy was in a transition to a new leadership team. The Academy was raising expectations and setting a higher standard for our educators. There was a higher than expected turnover rate due to these circumstances. Currently, in the 2020-2021 school year only 2 staff did not return and has remained consistent. A recent staff survey shows that all but one staff member plan to return for the 2021-2022 school year.
School Comments 2018-2019	The Academy continued to struggle with teacher retention and the Head of School and Board took action in December 2019 by implementing a salary adjustment for current staff and future staff that is more incentivizing to attract and retain high-quality educators.
School Comments 2017-2018	AOD recruits and hires highly qualified teachers. One way we work to retain teachers is by offering a bonus pay based on job performance. AOD uses specific criteria to determine which teachers would qualify for the incentive. Also, they receive a retention bonus for returning each year. The longer the teacher has been at AOD the higher the bonus, up to \$1,000. A majority of the teachers leave because of salary. AOD does not have a pay scale that is competitive with districts, since charters do not get the same funding that districts receive. Many teachers stay for the first couple years of teaching to get experience and then leave in search of a higher salary for their experience and degree level.

For the 2020-2021 school year the Academy of Dover was seeing great results from a new leadership team. Morale and job satisfaction among teachers and staff was found to be above the National average. In fact, the retention rate of teachers was 90%, with only 2 teachers not returning.

Q85.School's professional development plans support teachers and leadership.



<p>School Comments 2019-2020</p>	<p>Each year teachers are given a survey to identify their areas of need. This information is used to drive professional development the following year. The administration schedules PD around the teachers' needs expressed in the survey, and PD that will help teachers in the classroom based on the teacher observations. Administrations participate in all PD opportunities provided to school staff. During each of the weekly PLCs the staff are asked to share any of their current needs, which are immediately addressed if possible.</p>
<p>School Comments 2018-2019</p>	<p>Each year teachers are given a survey to identify their areas of need. This information is used to drive professional development the following year. The administration schedules PD around the teachers' needs expressed in the survey, and PD that will help teachers in the classroom based on teacher observations. Administration participate in all PD opportunities provided to school staff. During each of the weekly PLCs, the staff are asked to share any of their current needs, which are immediately addressed if possible.</p>
<p>School Comments 2017-2018</p>	<p>Each year teachers are given a survey to identify their areas of need. This information is used to drive professional development the following year. The administration schedules PD around the teachers needs expressed in the survey, and PD that will help teachers in the classroom based on teacher observations. Administration participate in all PD opportunities provided to school staff.</p>

Each year teachers are given a survey to identify their areas of need. This information is used to drive professional development the following year. The administration schedules PD around the teachers' needs expressed in the survey, and PD that will help teachers in the classroom based on the teacher observations. Administrations participate in all PD opportunities provided to school staff. During each of the weekly PLCs the staff are asked to share any of their current needs, which are immediately addressed if possible. Staff are also given a yearly survey on teaching roles and possibly given opportunities to change positions depending on enrollment and need in different areas at the school.

Q86.

Review the table above with the school's teacher retention trends.

Describe the school's plans to monitor and minimize teacher attrition rates. Provide information about why teachers leave the school.

The Academy currently has a 90% teacher retention rate. This is increased from 45% retention rate from the previous year. The plan is to maintain this high level of retention by continuing to provide more competitive salaries and an atmosphere that teachers feel appreciated and want to be a part of for many years.

Q87. Describe how the school's professional development plans have evolved over the course of the charter term to support teachers and leadership.

The Academy continues to provide quality PD on academics, social emotional learning and classroom management and procedures. A leadership team consisting of administrators and teachers attended the National Model Schools Conference in Nashville. This resulted in the team learning many important skills and ideas. At the beginning of this school year all of the leadership team members provided the Academy with PD on information, ideas, methods and skills acquired at the Model Schools Conference. Also one of the professional speakers at the conference was commissioned to come to the Academy and share her Model Schools presentation to the entire school. The staff is also becoming more involved and the number of teacher leaders in the school is growing. These leaders are given opportunity to enhance themselves as leaders within the school. We intend to keep this positive trend growing.

Q88. Describe how the school's completion of educator evaluations has evolved over the course of the charter term.

Evaluations are done frequently to provide feedback to teachers. These are official and unofficial walkthroughs and evaluations. These vary in duration and can be just random visits. Immediate feedback is provided to the teachers to give them compliments or strategies to use while teaching. In addition to the frequent walkthroughs, the Academy administration also ensures the DPAS process is followed and full evaluations, whether formative or summative, occur on a scheduled basis.

3.8. Closure Requirements

Q89. Describe the school's plan for procedures it will follow in the event of the closure or dissolution of the school. The plan should, at a minimum, address each of the following areas:

- Current balance of contingency reserve funds to be used to cover accrued expenses including summer pay obligations (identify estimated amount for the 2016-17 school year), final audit (identify estimated cost), and other expenses typically incurred by June but paid in July or thereafter.
- If the current contingency reserve balance is insufficient to cover the estimated costs identified above, discuss the school's plan for ensuring the required funds are set aside, including the timeframe for meeting this requirement.



- **Identification of the individuals responsible for handling the school's final closeout activities after closure or dissolution (i.e., who will process any final payments, coordinate the final audit, etc.).**

The Academy of Dover has a contingency reserve fund of \$1,475,000 as well as an unallocated fund of \$568,303. Additionally, the current local funds is \$777,879, not including the additional local funds that will be received this fiscal year. There would be sufficient funds to cover summer pay obligations (salary and OEC's) based on the most recent audit which would equate to \$314,919. This amount would also cover other expenses associated with school closure. In the event of a closure, Academy of Dover's Head of School, Assistant Head of School and Finance Specialist would remain employed through August to ensure the proper processing of payroll and to close out any other bills. The Head of School would oversee the proper close out of all school records and to lead all closeout activities.



4. Financial Performance

4.1. Financial Performance

Note: Please utilize the hyperlink in this sentence for more information about the Financial Performance Framework (<https://www.doe.k12.de.us/Page/2626>).

Financial Performance Framework Ratings	Near Term Indicators				Sustainability Indicators				Financial Management and Oversight	OVERALL RATING
	Current Ratio	Days Cash	Enrollment Variance	Default, Loan Covenants, & Debt Service Payments	Total Margin	Debt Asset Ratio	Cash Flow	Debt Service Coverage Ratio		
Year	1a	1b	1c	1d	2a	2b	2c	2d	3	
2017-2018	F	M	AS	M	AS	AS	F	N/R	M	Approaching Standard
2018-2019	F	AS	AS	M	F	F	F	N/R	M	Falls Far Below Standard
2019-2020	M	M	AS	M	M	M	AS	N/R	M	Meets Standard
2020-2021	As Soon As Available	As Soon As Available	As Soon As Available	As Soon As Available	As Soon As Available	As Soon As Available	As Soon As Available	As Soon As Available	As Soon As Available	As Soon As Available

DOE Summary:

Academy of Dover's overall ratings have improved over the course of its current charter term. The school met the standard in SY 19/20, but in SY 17/18 and SY 18/19, the school received ratings of "Approaching Standard" and "Falls Far Below Standard," respectively. At the individual measures level, in SY 17/18 AOD had 5 out of 8 measures that did not meet standard (2-Falls Far Below Standard; 3-Approaching Standard). In SY 18/19, AOD had 6 out of 8 measures that did not meet standard (4-Falls Far Below Standard; 2-Approaching Standard). In SY 19-20, AOD did not have any measures rated "Falls Far Below Standard" and received two ratings of "Approaching Standard."

Q90.School's financial performance over the current charter term

School Comments 2019-2020	New leadership came on and the enrollment as well as the financial situation at the Academy was not up to par. Focused efforts were made to insure the school is in a stronger position both academically and financially. Regular monitoring of both academic and financial operations occur.
----------------------------------	--



School Comments 2018-2019	While we are very aware and acknowledge that the most recent audit, completed June 30, 2019, shows some concerning results in the Financial Performance Framework, we also know that we are making the right changes over the past few months and that the charter modification will be significant in our future financial viability. One factor that has had a longstanding and major effect on a number of the financial frameworks for the Academy is the Mosiaca Settlement. This debt has been paid in full as of from the local reserves, and will also have a significant impact on the local funds.
School Comments 2017-2018	AOD has met standard in only 2 of the 8 measures. There have been improvements in 1b and 2b where we have gone up in those areas over the last two years. However, in 1a there was a decrease in rating and all other areas have remained the same from fiscal years 2017 to 2018. We have outlined more specific information for each metric in the sections below.

The Academy of Dover has significantly improved its financial situation over the current charter term. Focused efforts have remained on ensuring the Academy is in a strong position both academically and financially. Regular monitoring of the Financial Performance Framework is in place.

Q91. Financial practices that the school has implemented to improve the school's financial outcomes

School Comments 2019-2020	All financial management is now done in house which allows for better oversight and real time monitoring of the financial matters.
School Comments 2018-2019	The budget is being strictly adhered to and regularly monitored. Once change that has occurred is that the Head of School is the person managing the finances.
School Comments 2017-2018	Since our revenue is directly related to our student enrollment, we are attempting to reach our authorized enrollment figures of 287 students. We are also attempting to control our expenses, since there has not been any measurable increase in revenue from our major revenue sources which are the State of Delaware and the local school districts.

The Academy of Dover Charter School continues to manage its finances with current employees. The Head of School serves as the Business Manager and works alongside the Financial Specialist to ensure the financial health of the Academy. Regular review of the financials, as well as a collaboration with the Department of Education has resulted in the Academy gaining a much healthier financial status in a short amount of time. The finances are tracked internally and proper planning is in place to ensure the purchases occur as budgeted.

Q92. Below is the measure(s) where the school did not meet the standard. You are invited to make a response.



<p>School Comments 2019-2020</p>	<p>1. NEAR TERM INDICATORS Measure 1c. Enrollment Variance: Actual Enrollment as of September 30 divided by Authorized Enrollment 2019-2020: 89% The enrollment variance depicts actual versus authorized enrollment. A school budget is based on projected enrollment but is funded based on actual enrollment; therefore, a school that fails to meet its enrollment targets may not be able to meet its budgeted expenses. The preferred result is more than 95%. School Response To Rating: Since June 30th, 2019, a myriad of enrollment and recruitment methods have been employed that have demonstrated an increase in enrollment and an upward trend. These have resulted in the Academy currently having a 99.7% enrollment variance in the 2020-2021 school year.</p> <p>2. SUSTAINABILITY INDICATORS Measure 2c. Cash Flow 2019-2020 1 YR: \$172,007 3 YR: \$159,095</p> <p>Cash flow indicates the trend in the school's cash balance over a period of time. This measure is similar to days cash on hand but indicates long-term stability versus near-term. Since cash flow fluctuations from year to year can have a long-term impact on a school's financial health, this metric assesses both three-year cumulative cash flow and annual cash flow. The preferred result is greater than zero. School Response To Rating: The cash flow for the three-year period has been negative, resulting in a metric rating of far below standard. Since the audit report, there have been concerted efforts with the budget to fix this concern and meet the standard. The July 31, 2019, board-approved budget shows a reserve amount of \$67, 320.01, while the October 31, 2019, board-approved budget has increased the contingency reserve to \$258,056.18 with an additional \$33,883.16 in additional unallocated funds. While this is not where it needs to be, it is significantly higher than it was in a short amount of time and trending in the right direction. This remains a focus of the Academy. The charter modification agreement will significantly impact this and will further enable the Academy to meet the standard of having a positive cash flow each year. In addition, in December 2020 contingency fund now has \$712,979.39 with an additional \$65,487.90 in unallocated funds. This shows the Academy's continued move in the right direction for cash flow.</p>
<p>School Comments 2018-2019</p>	<p>School comments for SY 2018-2019 can be found at: https://www.doe.k12.de.us/Page/2654 (https://www.doe.k12.de.us/Page/2654)</p>
<p>School Comments 2017-2018</p>	<p>School comments for SY 2017-2018 can be found at: https://www.doe.k12.de.us/Page/2654 (https://www.doe.k12.de.us/Page/2654)</p>

The Academy team has made a concerted effort to ensure full enrollment. While the 19/20 enrollment was at 89%, the 20/21 enrollment was at 101% and the 21/22 enrollment is at 102%.

The cash flow has remained another area of focus. The Academy has created and adhered to a solid budget that allows for financial recovery to continue. The financial stability of the Academy has increased significantly during the time the new Head of School has been in place due to the combined focus on academics, enrollment and budgeting.

Q93. Describe the school's financial performance over the current charter term. (This section is for the school to address any overall rating where the school has not met standards. The school will be able to address individual metrics in the sections below.)

While the cash flow and the enrollment were issues earlier this charter term, both have been rectified through concerted efforts. These efforts remain in place and have become ingrained in the daily operations of the Academy.

Q94. Identify changes to Financial practices that the school has implemented to improve the school's financial outcomes.

Since the new Head of School began in the fall of 2019, all financials are managed internally. The Head of School also serves as the Business Manager with the support of a financial specialist. There are daily financial conversations and the team reviews the budget, enrollment, and financials on a consistent basis. A spreadsheet is used internally to track and manage all funds and ensure the spending remains at or below budget.

Q95. Address any measure where the school did not meet the standard or is approaching standard.



The enrollment variance has been an area of focus and much attention has been on ensuring that enrollment targets are met and remain met. One of the strategies that the Academy has employed since the fall of 2019, is continuing to enroll students throughout the year as space allows. By providing strong academics and a whole child approach to learning, the students who enroll after the unit count closes are remaining with the Academy for the following year. This has significantly helped to close the enrollment variance over time. The cash flow has also been an area of focus by administration. There has been a concerted effort to increase the contingency reserve funds and the budget is made each year with the intent of saving the local funds to ensure a healthier financial situation is in place.

Q96. Performance Agreement Financial Performance Expectations

- Academy of Dover Charter School's 2015-16 overall financial rating is Meets Standard. By September 2021, our expectation is to achieve the overall rating of "Meets" standard as measured by the Financial Performance Framework. Each year, we will be on track to demonstrate economic viability and achieve our financial performance expectation. This progress will be monitored through our annual performance review.

DOE Summary:
Academy of Dover has earned an overall rating of "Meets Standard" in SY 19/20, the most recent year of its current charter term. Prior year performance did not meet standard.

School Comments 2019-2020	The Academy has continued to monitor and improve our economic viability. The two areas that were Approaching Standard have continued to improve. As of FY 21 our contingency fund has increased by over 1,000%.
School Comments 2018-2019	While we are very aware and acknowledge that the most recent audit, completed June 30, 2019, shows some concerning results in the Financial Performance Framework, we also know that we are making the right changes over the past few months and that the charter modification will be significant in our future financial viability. One factor that has had a longstanding and major effect on a number of the financial frameworks for the Academy is the Mosiaca Settlement. This debt has been paid in full as of from the local reserves, and will also have a significant impact on the local funds. We have also made direct and concerted efforts to increase our cash flow through both better budgeting as well as increased recruiting efforts.
School Comments 2017-2018	AOD's overall rating was Approaching Standard and we will continue our efforts to meet standard in every financial area in the future. Our gradual increase in student enrollment each year as well as the payment in full of our note payable in FY 2019 will have a positive effect on our financial performance. We are also attempting to control our expenses with major vendors. We negotiated a freeze in our bus contract for a two year period.

The Academy continues to monitor and improve economic viability. The contingency funds are now nearly \$1.5 million and the local funds are approaching \$1 million. Our expectation is to continue with a rating of "Meets" standard as measured by the Financial Performance Framework.

Q97. How the school developed and implemented a corrective action plan in response to audit findings (if applicable)

DOE Summary:
The school's FY20 independent audit did not have any audit findings.

School Comments 2019-2020	No audit findings existed therefore corrective action plan was needed.
School Comments 2018-2019	Not applicable.
School Comments 2017-2018	There was only one prior year finding and this finding was resolved.

The most recent audit did not have any audit findings. The Academy leadership is committed to proper practices and avoiding any audit findings.



Q98. Discuss the school's financial performance based on its approved Performance Agreement.

The Academy has an overall financial rating that meets standards and our expectation is to continue to achieve the overall rating of "Meets" standard as measured by the Financial Performance Framework.

Q99. Describe how the school developed and implemented a corrective action plan in response to audit findings (if applicable).

No findings exist for the current period.


Q100. Appendix 11: Upload a Summary of Findings from Independent Audits (if applicable)

Upload Required File Type: pdf, image, excel, word, text Max File Size: 30 Total Files Count: 10

Applicant Comments :

No findings exist for the current period.

Applicant Evidence :


Academy of Dover DRAFT FS 063021....

Uploaded on **9/30/2021** by **Michele Marinucci**

Q101. Appendix 12: Upload a Final Fiscal Year 2021 Revenue & Expenditure Budget Report in the prescribed Department format

Upload Required File Type: pdf, image, excel, word, text Max File Size: 30 Total Files Count: 10

Applicant Evidence :



FY21JuneFinalFinancialReport.pdf

Uploaded on **9/29/2021** by **Michele Marinucci**

Q102. Appendix 13: Upload an Approved Preliminary Fiscal Year 2022 Budget in the prescribed Department format

Upload Required File Type: pdf, image, excel, word, text Max File Size: 30 Total Files Count: 10

Applicant Evidence :



FY22AugApprovedPreliminaryBudget...

Uploaded on **9/29/2021** by **Michele Marinucci**

Q103. Appendix 14: Upload a Fiscal Year 2021 Audited Financial Statements (if final report is not available, a draft version is acceptable until final version is completed)

Upload Required File Type: pdf, image, excel, word, text Max File Size: 30 Total Files Count: 10

Applicant Evidence :


Academy of Dover DRAFT FS 063021....

Uploaded on **9/28/2021** by **Michele Marinucci**




Q104. Appendix 15: Upload A list of all due process settlements (if applicable) and financial impact.

Upload Required File Type: pdf, image, excel, word, text Max File Size: 30 Total Files Count: 20

Applicant Comments :

The Academy has not had any due process settlements.

Applicant Evidence :


The Academy of Dover has not had a...

Uploaded on **9/30/2021** by **Michele Marinucci**

Q105. If the projected enrollment is increasing or decreasing by 5% or more over the term of the charter, please include a separate written justification for the modification request as well as budget documents reflecting the new enrollment figures.

The projected enrollment is not increasing or decreasing by 5% or more over the term of the charter.



5. Innovation

Q106.School's innovative practice(s) that could be replicated at other schools in Delaware

<p>School Comments 2019-2020</p>	<p>The Academy had a great success with remote learning during the 2019-2020 school year. All students were provided a Chromebook to use from home. The staff organized and developed online teaching quickly after the pandemic occurred. Physical packets of work were also provided to students that wanted to use paper and pencil instead the computer to turn in their work. In some cases, Chromebooks and packets of work were delivered to the students that were unable to get to the school to pick them up. The Academy also procured donations of food from a local butcher shop that was made available to families that wanted it. Again, food was also delivered to families unable to get to the Academy building. In addition, buses traveled routes to deliver school lunches for families to pick up. The Academy has a great process for Response to Intervention (RTI) that proves to be effective. Currently the Academy is using Edmentum for reading RTI and Math. Our schedule allows for a 30-minute block for both Reading and Math RTI during the day in addition to 90 minutes if dedicated time for ELA and 60 minutes for Math. This allows Academy students to spend about 3 hours per day in a small group with the classroom teacher, para, and reading and math interventionists. Progress monitoring is done throughout the year with Edmentum for ELA and Math. Students also complete other benchmark testing weekly or bi-weekly depending on their tier. The interventionists meet with classroom teachers and observe RTI times to ensure that our program is being implemented with fidelity. Staff continue to monitor and analyze data in order to make changes that will enhance the practices in place. There are a number of positive behavior incentives in place to continue the build a culture of caring amongst our students, including the Academy of Leaders, which is demonstrated by or "bow tie boys and "blue ribbon girls." Some of these students had been on a more negative trajectory, and with positive reinforcement and recognition, have turned around and become student leaders at the Academy.</p>
<p>School Comments 2018-2019</p>	<p>The Academy has a great process for Response to Intervention (RTI) that proves to be effective. Currently, The Academy uses Star Renaissance for reading RTI and Math. Our schedule allows a 30 minute block for both reading and math RTI during the day in addition to 90 minutes of dedicated time for ELA and 60 minutes for Math. This allows Academy students to spend about 3 hours per day in small group with the classroom teacher, para, and if needed, the reading and math interventionists. Progress monitoring is done throughout the year. Students also complete other benchmark testing weekly or bi-weekly depending on their tier. Also, students in math practice on IXL daily for the additional on grade level math practice. The interventionists meet with classroom teachers and observe RTI times to ensure that our program is being implemented with fidelity. Staff continue to monitor and analyze data in order to make changes that will enhance the practices in place. There are a number of positive behavior incentives in place to continue to build a culture of caring amongst our students, including the Academy of Leaders, which is demonstrated by our "bow tie boys" and "blue ribbon girls". Some of these students were on a more negative trajectory, and with positive reinforcement and recognition, have turned around and become Academy leaders.</p>
<p>School Comments 2017-2018</p>	<p>AOD has a great process for Response to Intervention (RTI) that proves to be effective. Currently AOD uses DIBELS for reading RTI and Math Inventory for math RTI. Our schedule allows a 30 minute block for both reading and math RTI during the day in addition to the regular ELA and Math blocks. This allows AOD students to spend about 3 hours per day in small group with the classroom teacher, para, and if needed, the reading and math interventionists. Students are tested 3 times per year in DIBELS and 4 times per year in MI. They also get benchmark testing done in DIBELS either weekly or bi-weekly depending on their tier. Also, students in math practice on IXL daily for the additional math practice at their grade level. The interventionists meet with classroom teachers and observe RTI times to ensure that our program is being implemented with fidelity. Staff continue to monitor and analyze data in order to make changes that will enhance the practices in place.</p>

Describe the school's innovative practice(s) that could be replicated at other schools in Delaware. Please include the data that supports the success of these practice(s).



The Academy had a great success with remote learning when necessary during the 2020-2021 school year. All students were provided a Chromebook to use from home. The staff continued to use both in person and remote/online teaching that was developed after the pandemic occurred the previous year. During periods of remote learning or if students chose to be remote learners, physical packets of work were also provided to students that wanted to use paper and pencil instead of the computer to turn in their work. In some cases, Chromebooks and packets of work were delivered to the students that were unable to get to the school to pick them up. Food was made available from the Academy building. In addition, sometime we even delivered school lunches for families

The Academy has a great process for Response to Intervention (RTI) that proves to be effective. Currently the Academy is using Edmentum for reading RTI and Math. Our schedule allows for a 30-minute block for both Reading and Math RTI during the day in addition to 2 hours of dedicated time for ELA and 60 minutes for Math. Additionally, there is a dedicated period for science and social studies. The academic schedule for ELA and Math at the upper grade levels provides for 60 minutes each of ELA, math, science and social studies instruction to ensure adequate time for each of the core content areas. This allows Academy students to spend about 3 hours per day in a small group with the classroom instructors. Progress monitoring is done throughout the year with Edmentum for ELA and Math. Students also complete other benchmark testing weekly or bi-weekly depending on their tier. The interventionists meet with classroom teachers and observe RTI times to ensure that our program is being implemented with fidelity. Staff continue to monitor and analyze data in order to make changes that will enhance the practices in place. There are a number of positive behavior incentives in place to continue the build a culture of caring amongst our students, including the Academy of Leaders, which is demonstrated by or "bow tie boys and "blue ribbon girls." Some of these students had been on a more negative trajectory, and with positive reinforcement and recognition, have turned around and become student leaders at the Academy.

We realize the importance of meeting the needs of the whole child--and the family. In an effort to ensure our students basic needs are met, we have added a therapeutic component to our program. We have contracted with a local agency and have a certified mental health counselor, certified therapist, and a certified social worker in our school each week providing much needed services and supports to our students and their families.

We have also created a "Print Shop" within our Academy. Students learn graphic design, marketing, basic business operations and so much more through this student-led Print Shop. The students love the ability to create items such as mugs, tumblers, clothing, and signs!



6. Five-Year Planning


6.1. Projected Enrollment

Q107. Fill out the five-year enrollment chart by grade level (see Resources). Ensure that the chart allows for the natural progression of students from year to year.


- Note: This will become the school's authorized enrollment for the new charter term.
- Note: An increase or decrease in enrollment exceeding 5%, but less than 15%, is considered a minor modification of the school's charter. 14 Del. Admin. C. § 275.9.9.1.4. An increase or decrease in enrollment exceeding 15% is considered a major modification of the school's charter, which requires a review by the Charter School Accountability Committee and the assent of the State Board of Education. See 14 Del. C. § 511(b) (2); 14 Del. Admin. C. § 275.9.8.1.3. As such, **if the projected enrollment is increasing or decreasing by 5% or more over the term of the charter, the school is required to submit a Charter Modification Application (<https://www.doe.k12.de.us/Page/4361>) including budget sheets, and a budget narrative reflecting the new enrollment figures.**

Upload Required File Type: excel Max File Size: 30 Total Files Count: 20

Resources


Projected Enrollment Table.xlsx

Applicant Evidence :


Projected Enrollment Table.xlsx

Uploaded on **9/29/2021** by **Michele Marinucci**

6.2. The school's plans for the next five years of the charter

(Note: The school's responses to the next 4 questions in this section will be used to populate the Academic Performance section of the school's new Performance Agreement.)

Q108. Explain how the school's Board and School Leadership Team will measure and evaluate the academic progress of individual students, student cohorts, and the school as a whole throughout the school year, at the end of each academic year, and for the term of the charter contract.

The school's Board and School Leadership Team will measure and evaluate the academic progress of individual students, student cohorts, and the Academy as a whole throughout the school year, at the end of each academic year, and for the term of the charter contract through multiple methods. The Academy assesses every student multiple times per year with EDMUNTUM--an assessment program that assesses proficiency and also has a learning path that follows with research-based skill building. The results are analyzed by the leadership team, within PLCs with the educators, and also reviewed with the students. Goals are set for growth and proficiency and then as additional assessment periods occur, the growth and the achievement results are reviewed again. This is a cyclical process, involving students, educators and leadership. Additional measures of academic success occur through summative assessments provided as part of the curriculum. In addition to the more frequent and ongoing measures of academic success, the Board, Academy Leadership Team, educators, and students, all monitor and review the growth and proficiency results of the state assessment. The educators monitor the teaching of the Common Core Standards in their areas of instruction and, during PLC conversations, discuss with their fellow educators and the Academy Leadership Team how their students (individually, in cohorts, and within grade levels) are doing in achieving mastery of the standards.

Q109. Outline the clearly measurable annual performance status and growth goals that the school will set over the course of the next charter term in order to monitor and evaluate its progress accelerating student achievement. Include information about proposed school's student performance goals and the DSSF.



The Academy of Dover's goal is to meet or exceed standards in all academic areas. We have a specific focus on the subgroup populations, including low-income, students with disabilities, and English Learners, as well as our students from diverse ethnic groups. Our academic achievement goal is to increase the total number of students meeting proficiency to no less than 50% of students being proficient, while also increasing the overall number of proficient students to be at least that of the state average. Our true goal is to exceed the state average in all grades and all subgroups.

Q110. Describe the student performance standards for the school as a whole.

The Academy of Dover will meet or exceed expectations on all metrics of the academic performance framework.

Q111. In addition to the State's mandatory assessments, identify the primary interim assessments that the school will use to assess student learning needs and demonstrate academic progress throughout the year. Explain how these interim assessments align with the school's curriculum, performance goals, and Delaware Content Standards (Common Core State Standards in English Language Arts, Mathematics, and Next Generation Science Standards).

We will continue to use EDMENTUM to track our students ELA, Reading, and Math progress in all grade levels. We will also use DIBELS, as well as the assessments provided as part of the curriculum. Using the aforementioned assessment methods, the leadership team, as well as the educators, will spend PLC time reviewing the assessment data and ensuring it aligns with the Common Core Standards and Next Generation Science Standards.

Q112. Explain how the school will collect and analyze student academic achievement data, use the data to refine and improve instruction, and report the data to the school community. Identify the person(s), position(s), and/or entities that will be responsible and involved in the collection and analysis of assessment data.

Data review is a consistent and ongoing part of the processes in place within the Academy. The Academy Leadership Team reviews current data each Monday morning and the educators along with the leadership team review data every Wednesday during the PLCs. The data is analyzed to identify if it is representative of the actual learning taking place, and a chart is used to track the teaching and learning of the standards for each core subject area. The Head of School and Assistant Head of School lead the curriculum and instruction within the Academy and are responsible for leading the analysis of the data. The educators also have a shared responsibility of collecting and analyzing the data.

Q113. Describe the corrective actions the school will take, pursuant to 14 Del. C. § 512(5), if it falls short of student academic achievement expectations or goals at the school-wide, classroom, or individual student level. Explain what would trigger such corrective actions and who would be responsible for implementing them.

If we were to fall short of the student academic achievement expectations or goals at any level, we would review the shortcomings and conduct an analysis to identify the root cause. Based on the findings, appropriate action would be taken. The Head of School and the Assistant Head of School would be responsible for implementing them.

Q114. Describe how state data systems will be used and monitored to support informed decision-making in the areas of academic performance, organizational management, and financial viability. Include any coordinated professional development intended to sustain these processes.

Ed Insight Reports, FSF, eSchool, PS IEP, Data Service, and other similar systems are used and monitored on a regular basis. Many reports are reviewed, or data pulled and then reviewed, on a daily and weekly basis. Attendance, academic, behavioral, and financial data are all regularly reviewed and discussed at the Academy Leadership Team meetings. The leadership team members as well as the educators participate in professional development, whether in house or provided, to ensure understanding of these systems.

Q115. Describe how the School Leadership Team will oversee and monitor compliance with statutory requirements as measured by the Organizational Framework. Include any additional organizational goals and targets that the school will have. State the goals clearly in terms of the measures or assessments that the school plans to use.

The Academy of Dover's Leadership Team oversees and monitors compliance with statutory requirements as measured by the Organizational Framework through regular conversations and meetings, held every Monday. The goal of the Academy team is to ensure exceeds or meets within all areas of the Organizational Framework. Depending on the area being measured, different leadership team members have specific areas of responsibility.

Q116. Provide detailed information on the school's plan for any changes or improvements to its facility for the five years of the next charter renewal term. The plan should include an adequate and detailed financial arrangement and timeline for the proposed facility improvements.

The Academy of Dover is in a leased building. The most recent change to the facility is the building of an "upper school" across the parking lot from the current building. This was presented as a part of the most recent charter modification application that was submitted this past year. No additional facility changes are planned at this time.



Q117. Provide detailed information on the board's plan to assess its performance annually and hold itself accountable for achieving its goals and govern effectively.

The board will continue to assess itself on the performance of the Academy's academic, organizational and financial performance. The board maintains a goal of exceeding with a minimum expectation of meeting the standards in these frameworks. While the Head of School leads the day to day oversight and management of the Academy, the board maintains frequent contact and is provided the necessary information to support and lead at a board level.

Q118. Number of school attendance days (2022-2023)

180 students; 190 staff days in 2021-2022

Q119. Number of full days (2022-2023)

175 full student days in 2021-2022

Q120. Number of half days (2022-2023)

5 half days in 2021-2022

Q121. Number of instructional hours in a day (2022-2023)

6.8 hours of instruction per day

Q122. Number of hours in a full day (2022-2023)

7.3 hours in a full day

Q123. Number of hours in a half day (2022-2023)

4.25 hours in a half day



7. Compliance certification statement

Q124. The Board of Directors of this charter school certifies that it will materially comply with all applicable laws, rules, regulations, and provisions of the charter relating to the education of all students enrolled at the school. We have reviewed the Delaware Charter Law (14 Del. C. Ch. 5) and 14 DE Admin. Code § 275 in Department of Education regulations (Regulation 275), and have based the responses in this renewal application on the review of these documents. Signature of the Chairperson of the Board of Directors (or designated signatory authority)
Signature

Q125. Name of the Chairperson of the Board of Directors (or designated signatory authority)

Kimeu W. Boynton

Q126. Title (if designated)

President of the Board of Directors

Q127. Date of Signature

Thu Sep 30 2021 (Eastern Daylight Time)





8. Renewal Application Certification Statement

Q128. I hereby certify that the information submitted in this application for renewal of a charter school is true to the best of my knowledge and belief; that this application has been approved by the school's Board of Directors; and that, if awarded a renewed charter, the school shall continue to be open to all students on a space available basis, and shall not discriminate on the basis of race, color, national origin, creed, sex, gender identity, ethnicity, sexual orientation, mental or physical disability, age, ancestry, athletic performance, special need, proficiency in the English language or a foreign language, or prior academic achievement. This is a true statement, made under the penalties of perjury.

Signature: Chairperson of Board of Directors (or designated signatory authority)

Signature

Q129. Date of signature

Thu Sep 30 2021 (Eastern Daylight Time)



Q130. Name of Chairperson of Board of Directors (or designated signatory authority)

Kimeu W. Boynton

Q131. Title (if designated)

President of the Board

Q132. Date of approval by board of directors

Thu Sep 23 2021 (Eastern Daylight Time)





9. Performance Agreement Template

Q133. Complete the Performance Agreement Template (see Resources) in conjunction with the Department of Education should the school be renewed by the Secretary with the assent of the State Board of Education.

Upload Required File Type: pdf, word Max File Size: 30 Total Files Count: 1

Applicant Comments :

Portions of the Performance Agreement Template are unable to be completed at this time since some data has not yet been made available.

Resources


Performance Agreement Template.d...

Applicant Evidence :


Performance Agreement Template (1...

Uploaded on **9/30/2021** by **Michele Marinucci**

Q134. I have completed this renewal application to the best of my ability and to the extent of my knowledge.

I agree

Renewal Application - September 30, 2021 (Updated) :: Enrollment and Demographic Info Table

ENROLLMENT & DEMOGRAPHIC INFORMATION					
	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Total Enrollment	270	272	266	329	379
Gender					
% Male	44.07%	49.26%	51.50%	53.19%	53.0%
% Female	55.93%	50.74%	48.50%	46.81%	47.0%
Ethnicity/Race					
% African American	72.96%	75.00%	77.82%	75.08%	79.7%
% American Indian	0%	0%	0%	.30%	1.6%
% Asian	0%	0%	0%	0	0.0%
% Hispanic/Latino	13.33%	12.87%	11.65%	10.03%	11.3%
% White	10.00%	8.82%	6.39%	11.85%	18.5%
% Multiracial	2.96%	2.21%	3.01%	2.74%	
Special Populations					
%Special Education ³	7.41%	5.88%	10.15%	12.77%	10.6%
% English Language Learners	11.48%	11.40%	10.15%	8.51%	8.2%
% Low-Income	69.63%	62.87%	56.39%	52.28%	66.0%

Renewal Application - September 30, 2021 (Updated) :: School Enrollment Trends Table

ENROLLMENT & DEMOGRAPHIC INFORMATION					
	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Total Enrollment	270	272	266	329	379
Gender					
% Male	44.07%	49.26%	51.50%	53.19%	53.0%
% Female	55.93%	50.74%	48.50%	46.81%	47.0%
Ethnicity/Race					
% African American	72.96%	75.00%	77.82%	75.08%	79.7%
% American Indian	0%	0%	0%	.30%	1.6%
% Asian	0%	0%	0%	0	0.0%
% Hispanic/Latino	13.33%	12.87%	11.65%	10.03%	11.3%
% White	10.00%	8.82%	6.39%	11.85%	18.5%
% Multiracial	2.96%	2.21%	3.01%	2.74%	
Special Populations					
%Special Education ³	7.41%	5.88%	10.15%	12.77%	10.6%
% English Language Learners	11.48%	11.40%	10.15%	8.51%	8.2%
% Low-Income	69.63%	62.87%	56.39%	52.28%	66.0%

**Renewal Application - September 30, 2021 (Updated) :: Board Financial
and Governance Training Table**

First Name	Last Name	Term Begin Date	Term End Date	Role/Title	Financial Training Date
Kimeu	Boynton			President	3/19/2014
Bishop W. James	Thomas			Treasurer	7/31/2018
Charles	Fletcher				9/15/2015
Candace	Holmes				10/24/2018
Esosa	Iriowen				10/30/2019
Ashley	Murphy			Parent Rep	9/30/2021
Michele	Marinucci			Head of School	8/15/2019
Lauren	Comegys			Teacher Rep	12/20/2017

**Board
Governance
Training Date***

6/11/2020

8/30/2018

8/30/2018

8/3/2021

8/3/2021

8/3/2021

8/3/2021

**Renewal Application - September 30, 2021 (Updated) :: Citizens Budget
Oversight Committee Table**

First Name	Last Name	Term Begin Date	Term End Date	Role/Title	Financial Training Date
Kimeu	Boynton			President	3/19/2014
Bishop W. James	Thomas			Treasurer	7/31/2018
Charles	Fletcher				9/15/2015
Candace	Holmes				10/24/2018
Esosa	Iriowen				10/30/2019
Ashley	Murphy			Parent Rep	9/30/2021
Michele	Marinucci			Head of School	8/15/2019
Lauren	Comegys			Teacher Rep	12/20/2017

**Board
Governance
Training Date***

6/11/2020

8/30/2018

8/30/2018

8/30/2018

8/3/2021

8/3/2021

8/25/2019

8/3/2021

**Renewal Application - September 30, 2021 (Updated) :: Financial
Performance Supplement - November 12, 2021**

IV. FINANCIAL PERFORMANCE

4.1 Financial Performance

Note: Please utilize the hyperlink in this sentence for more information about the [Financial Performance Framework](#).

Financial Performance Framework Ratings	Near Term Indicators				Sustainability Indicators				Financial Management and Oversight	Overall Rating
	Current Ratio	Days Cash	Enrollment Variance	Default, Loan Covenants, & Debt Service Payments	Total Margin	Debt Asset Ratio	Cash Flow	Debt Service Coverage Ratio		
Year	1a	1b	1c	1d	2a	2b	2c	2d	3	
2017-2018	F	M	AS	M	AS	AS	F	N/R	M	Approaching Standard
2018-2019	F	AS	AS	M	F	F	F	N/R	M	Falls Far Below Standard
2019-2020	M	M	AS	M	M	M	AS	N/R	M	Meets Standard
2020-21	M	M	M	M	M	M	M	N/R	M	Meets Standard

DOE Summary:

Academy of Dover’s overall ratings have improved over the course of its current charter term. The school met standard in SY 19/20, but in SY 17/18 and SY 18/19, the school received ratings of “Approaching Standard” and Falls Far Below Standard,” respectively. At the individual measures level, in SY 17/18 AOD had 5 out of 8 measures that did not meet standard (2-Falls Far Below Standard; 3-Approaching Standard). In SY 18/19, AOD had 6 out of 8 measures that did not meet standard (4-Falls Far Below Standard; 2-Approaching Standard). In SY 19-20, AOD did not have any measures rated “Falls Far Below Standard” and received two ratings of “Approaching Standard.”

a) School's financial performance over the current charter term

<p>School Comments 2019-2020</p>	<p>New leadership came on and the enrollment as well as the financial situation at the Academy was not up to par. Focused efforts were made to insure the school is in a stronger position both academically and financially. Regular monitoring of both academic and financial operations occur.</p>
<p>School Comments 2018-2019</p>	<p>While we are very aware and acknowledge that the most recent audit, completed June 30, 2019, shows some concerning results in the Financial Performance Framework, we also know that we are making the right changes over the past few months and that the charter modification will be significant in our future financial viability. One factor that has had a longstanding and major effect on a number of the financial frameworks for the Academy is the Mosaica Settlement. This debt has been paid in full as of from the local reserves, and will also have a significant impact on the local funds.</p>
<p>School Comments 2017-2018</p>	<p>AOD has met standard in only 2 of the 8 measures. There have been improvements in 1b and 2b where we have gone up in those areas over the last two years. However, in 1a there was a decrease in rating and all other areas have remained the same from fiscal years 2017 to 2018. We have outlined more specific information for each metric in the sections below.</p>

b) Financial practices that the school has implemented to improve the school's financial outcomes

<p>School Comments 2019-2020</p>	<p>All financial management is now done in house which allows for better oversight and real time monitoring of the financial matters.</p>
<p>School Comments 2018-2019</p>	<p>The budget is being strictly adhered to and regularly monitored. Once change that has occurred is that the Head of School is the person managing the finances.</p>
<p>School Comments 2017-2018</p>	<p>Since our revenue is directly related to our student enrollment, we are attempting to reach our authorized enrollment figures of 287 students. We are also attempting to control our expenses, since there has not been any measureable increase in revenue from our major revenue sources which are the State of Delaware and the local school districts.</p>

c) Indicator measure where school did not meet standard or is approaching standard

School Comments 2018-2019	School comments for SY 2018-2019 can be found at: https://www.doe.k12.de.us/Page/2654
--------------------------------------	---

School Comments 2017-2018	School comments for SY 2017-2018 can be found at: https://www.doe.k12.de.us/Page/2654
--------------------------------------	---

a. Describe the school’s Financial performance over the current charter term (This section is for the school to address any overall rating where the school has not met standards. The school will be able to address individual metrics in the sections below.)

We are proud of the current ratings that demonstrate the results of our concerted efforts over the past few years. Now that we have met the standard in each sub area and overall, we intend to maintain performance and keep our financial frameworks ratings at this level.

b. Identify changes to Financial practices that the school has implemented to improve the school’s financial outcomes.

The Academy has continued to focus on multiple areas, enrollment, financial management and oversight of spending and revenue. For the past few years, all of the day to day and management have occurred in house by a small team. These practices have allowed us to monitor in real time and ensure that we keep ourselves within our budget. We have also significantly increased our enrollment efforts, which also has a major impact on our finances.

c. Address any measure where school did not meet standard or is approaching standard

N/A

Appendix 1 - Data Source for Mission-Specific Goal(s)

Delaware Department of Education

Discipline Incidents by GradeLevel in School Year 2020

District / School Name	Total	KG	01	02	03	04	05
Total	76	1	6	20	8	18	23
Academy of Dover Charter School	76	1	6	20	8	18	23
0-1 incidents	45	1	1	13	7	14	9
2-5 incidents	29		5	6	1	4	13
6+ incidents	2			1			1
Academy of Dover Charter School	76	1	6	20	8	18	23
0-1 incidents	45	1	1	13	7	14	9
2-5 incidents	29		5	6	1	4	13
6+ incidents	2			1			1

Appendix 2 - Curriculum Documents

Academy of Dover Math Curriculum Overview 2020

Table of Contents:

AOD Mathematics Overview	2
AOD RTI/MTSS Process	3 - 4
AOD Mathematics Scope & Sequence, K – 5	5 - 60
AOD Mathematics Scope & Sequence, 6 – 8	61 - 107
2nd Grade Unit: Module 1	108
4th Grade Unit: Module 5	108
8th Grade Unit: Module 4	108

Mathematics at Academy of Dover

At Academy of Dover, we have worked diligently to improve our mathematics instruction. In 2020, we adopted Eureka Math as our primary curricular resource for mathematics. The introduction of this high quality instructional material has had a direct impact on our students. AOD uses Eureka as designed by the publisher.

Our focus on creating hands-on learning experiences for children is centered around manipulating the concrete world around them and encourages students to develop strong numeracy skills that prepare them for high school. Mathematics at Academy of Dover is not a simple rote memorization of facts; it is an exploration into the mathematics that provide the foundation for scientific exploration.

We have designed our schedule to enable our Professional Learning Communities to flourish. Teachers meet weekly to analyze data. Teachers devote their time to best practices for use within the Eureka materials, incorporating manipulatives into their daily lessons, and focus on ways to differentiate and meet the needs of all of their learners. Teachers spend time in these PLCs workshopping to share innovative strategies, analyze data from Eureka exit tickets, and collaborate using a cycle of inquiry. The PLCs are facilitated by the Head of School and the Assistant Head of School. Also, teachers use the assessments in Eureka during whole and small group to provide additional data for forming RTI groups and addressing the needs of Tier 1- Tier 3 students.)

Additionally, Academy of Dover has Professional Development days. Whenever possible, teachers are encouraged to meet with their PLC team to further their data analysis and further their work in mathematics instruction. In order to address the weakness of the yellow rating in Gateway 3 the administration is ensuring professional development with grades 6 – 8 to provide acquisition and enhancement of the curriculum.

Academy of Dover's Mathematics RTI process

At Academy of Dover, we are transitioning from RTI to a more encompassing MTSS system and will closely follow any new regulations. Our current process is as follows:

1. Benchmark all students at the beginning of the school year per DE regulations. In school year 2021-2022 we are using Edmentum to regularly assess student progress. Benchmarks are given four times per year with scores communicated to both classroom teachers and parents. All students in all tiers, receive RTI time in the classroom 30 minutes a day.
2. Students performing below expectations are provided interventions in a Tier 2 setting based on the specific needs of the student. Interventions introduce students to the computerized and adaptive programs on Edmentum in a small group setting with heavy teacher support. Teachers incorporate intensive assistance on missing standards using manipulatives and Eureka Math material into these small group settings. Tier 2 interventions are primarily provided by the classroom teacher. Students receive the intervention a minimum of two times per week, with each child's schedule based on a combination of their math and reading needs.
3. Students who do not improve with Tier 2 interventions and who perform in the lowest 10% (nationally) or those who are not making any progress toward grade level expectations after multiple strategies have been attempted in the Tier 2 setting are provided more intense interventions via Tier 3 interventions. Special focus is given to hands-on learning activities, student discussion, and the development of numeracy at the developmental level. Students in 6 – 8 grades meet in a small group with their grade level math teacher.
4. Academy of Dover holds Student Support Team (SST) meetings per DE regulations to discuss strategies for working with the students. Meetings are facilitated by the Head of School and Assistant Head of School and always include the classroom teacher and a special educator. Parent communication is facilitated by the classroom teacher. Each meeting focuses on the needs of that child and analyzes the intervention strategies. New strategies are incorporated into that child's plan when and if needed.
5. Progress Monitoring: Teachers monitor the progress of the student in a variety of ways. First, is the child on trajectory to meet end of grade level expectations? This is the beginning question of each meeting. To analyze that question, teachers look at classroom work and benchmarks. Next, the team looks at the intervention provided, and ask if it is working for that child. Edmentum reports include growth, standard mastery, and time on task. Within the program, changes can be made to direct the student to focus on those standards that best align with the need of the child. The teacher also monitors the progress of the small group interaction.

6. Second Level Screening: For those students who require additional information in order to determine the best intervention, the math specialist uses the ongoing Edmentum reporting in grades 1 – 8. For kindergarten, the Edmentum reporting is used. Teachers monitor and map progress in all grades from their small groups during RTI.



A Story of Units:

A Curriculum Overview for Grades KN–5

Table of Contents:

Introduction.....	6
Curriculum Map.....	7
Kindergarten.....	9
Grade 1.....	18
Grade 2.....	26
Grade 3.....	36
Grade 4.....	48
Grade 5.....	60

Introduction

This document provides an overview of the academic year for Kindergarten through Grade 5, beginning with a curriculum map and followed by detailed grade-level descriptions.

The curriculum map is a chart that shows, at a glance, the sequence of modules comprising each grade of the entire elementary curriculum. The map also indicates the approximate number of instructional days designated for each module of each grade. Details that elaborate on the curriculum map are found in the grade-level descriptions. Each grade-level description begins with a list of the five to eight modules that comprise the instruction of that grade. That introductory component is followed by three sections: the **Summary of Year**, the **Rationale for Module Sequence**, and the **Alignment Chart** with the grade-level standards. The **Summary of Year** portion of each grade level includes four pieces of information:

- The critical instructional areas for the grade, as described in the Common Core State Standards for Mathematics¹(CCSS-M)
- The Key Areas of Focus² for the grade band (Note that this information is not available for Pre-Kindergarten.)
- The Required Fluencies for the grade (Note that this information is not available for Pre-Kindergarten.)
- The Major Emphasis Clusters for the grade (Note that this information is not available for Pre-Kindergarten.)

The **Rationale for Module Sequence** portion of each grade level provides a brief description of the instructional focus of each module for that grade and explains the developmental sequence of the mathematics.

The **Alignment Chart** for each grade lists the standards that are addressed in each module of the grade. Throughout the alignment charts, when a cluster is included without a footnote, it is taught in its entirety; there are also times when footnotes are relevant to particular standards within a cluster. All standards for each grade have been carefully included in the module sequence. Some standards are deliberately included in more than one module so that a strong foundation can be built over time.

¹http://www.corestandards.org/wp-content/uploads/Math_Standards1.pdf

²<http://www.corestandards.org/other-resources/key-shifts-in-mathematics/>

	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
1st TRIMESTER	M1: Numbers to 10 (43 days)	M1: Sums and Differences to 10 (45 days)	M1: Sums and Differences to 100 (10 days)	M1: Properties of Multiplication and Division and Solving Problems with Units of 2-5 and 10 (25 days)	M1: Place Value, Rounding, and Algorithms for Addition and Subtraction (25 days)	M1: Place Value and Decimal Fractions (20 days)
			M2: Addition and Subtraction of Length Units (12 days)			
	**M2: 2D and 3D Shapes (12 days)	M2: Introduction to Place Value Through Addition and Subtraction Within 20 (35 days)	M3: Place Value, Counting, and Comparison of Numbers to 1,000 (25 days)	M2: Place Value and Problem Solving with Units of Measure (25 days)	**M2: Unit Conversions (7 days)	M2: Multi-Digit Whole Number and Decimal Fraction Operations (35 days)
2nd TRIMESTER	M3: Comparison of Length, Weight, Capacity, and Numbers to 10 (38 days)	M3: Ordering and Comparing Length Measurements as Numbers (15 days)	M4: Addition and Subtraction Within 200 with Word Problems to 100 (35 days)	M3: Multiplication and Division with Units of 0, 1, 6-9, and Multiples of 10 (25 days)	M3: Multi-Digit Multiplication and Division (43 days)	M3: Addition and Subtraction of Fractions (22 days)
	M4: Number Pairs, Addition and Subtraction to 10 (47 days)	M4: Place Value, Comparison, Addition and Subtraction to 40 (35 days)	M5: Addition and Subtraction Within 1,000 with Word Problems to 100 (24 days)	M4: Multiplication and Area (20 days)		M4: Angle Measure and Plane Figures (20 days)
3rd TRIMESTER	M5: Numbers 10-20 and Counting to 100 (30 days)	M5: Identifying, Composing, and Partitioning Shapes (15 days)	M6: Foundations of Multiplication and Division (24 days)	M5: Fractions as Numbers on the Number Line (35 days)	M5: Fraction Equivalence, Ordering, and Operations (45 days)	M5: Addition and Multiplication with Volume and Area (25 days)
		M6: Place Value, Comparison, Addition and Subtraction to 100 (35 days)	M7: Problem Solving with Length, Money, and Data (30 days)	M6: Collecting and Displaying Data (10 days)		M6: Decimal Fractions (20 days)
	M6: Analyzing, Comparing and Composing Shapes	M6: Analyzing, Comparing and Composing Shapes	M8: Time, Shapes, and Fractions as Equal Parts of Shapes (20 days)	M7: Geometry and Measurement Word Problems (40 days)	M7: Exploring Measurement with Multiplication (20 days)	M6: Problem Solving with the Coordinate Plane (40 days) – spiraled through other units, not completed as stand alone

Key:			
Number	Geometry	Number and Geometry, Measurement	Fractions

Sequence of Kindergarten Modules Aligned with the Standards

Module 1: Numbers to 10

Module 2: Two-Dimensional and Three-Dimensional Shapes

Module 3: Comparison of Length, Weight, Capacity, and Numbers to 10

Module 4: Number Pairs, Addition and Subtraction to 10

Module 5: Numbers 10–20 and Counting to 100

Module 6: Analyzing, Comparing, and Composing Shapes

Summary of Year

Kindergarten mathematics is about (1) representing, relating, and operating on whole numbers, initially with sets of objects; and (2) describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics.

Key Areas of Focus for K–2: Addition and subtraction—concepts, skills, and problem solving

Required Fluency: K.OA.5 Add and subtract within 5.

Major Emphasis Clusters

Counting and Cardinality

- Know number names and count sequence.
- Count to tell the number of objects.
- Compare numbers.

Operations and Algebraic Thinking

- Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

Number and Operations in Base Ten

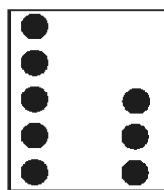
- Work with numbers 11–19 to gain foundations for place value.

Rationale for Module Sequence in Kindergarten

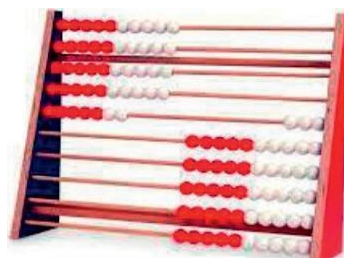
A Story of Units continues in Kindergarten. Just like in Pre-K, ladybugs, fingers, and plastic bears are manipulated and counted in Kindergarten, with work consistently moving to the pictorial and abstract levels. The new, foundational unit introduced in Kindergarten’s Module 5, is the supremely important unit of *one*. By the end of the Kindergarten year, students’ first steps into place value are evidenced as they make precise statements such as, “12 is the same as 10 ones and 2 ones!” Notice how this sets the foundation for later work with decimal units (e.g., in Grade 1, “12 is the same as 1 ten and 2 ones;” in Grade 2, “12 tens is the same as 10 tens and 2 tens or 1 hundred 2 tens;” and in Grade 4, “12 tenths is the same as 10 tenths and 2 tenths or 1 one and 2 tenths”).

To begin the year, Kindergarten students start out classifying and categorizing objects, leading to making one group (e.g., “I made a group of 9 goldfish. Look how I can count them in a line, in rows, and in a circle”). Students learn the way each number from 0 to 10 relates to five using fingers,

cubes, drawings, 5-groups (pictured below) and the Rekenrek, an abacus with a color change after the fifth bead (pictured below). The materials support students in seeing all numbers to ten in relationship to five, as they also see them on their fingers, the best manipulative of all! This renders 6, 7, 8, 9, and 10 more friendly as they see, for example, the 3 and 5 embedded within 8. Notice how the distribution of 8 beads as 5 beads and 3 beads sets the stage for the distributive property in Grade 3 (“8 fours = 5 fours + 3 fours, so $(5 \times 4) + (3 \times 4) = 20 + 12 = 32$ ”). Students close the module by investigating patterns of *1 more* and *1 less* (excluding the word *than*) using models such as the number stairs (pictured below right) with a color change after the fifth cube.



5-Group Card



Rekenrek



Number Stairs

In Module 2, students take a needed break from numbers to analyze their environment and describe and identify squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres. During both Modules 2 and 3, students also practice their fluency by counting and manipulating numbers to 10 during their fluency practice, giving them ample time to prepare for the addition and subtraction of Module 4.

In Module 3, students directly compare two quantities, first learning to identify the attribute being compared. The use of the word *than* is carefully developed first in the context of length (e.g., *taller than*, *shorter than*), then weight (*heavier than*, *lighter than*), and finally capacity. Notice how *more than* and *less than* are used to compare capacities (e.g., “The bucket holds *more than* the cup”). This transitions students smoothly into comparing numbers (e.g., “9 chairs is *more than* 6 chairs”). This concrete foundation for comparison is essential to students’ entire K–12 experience. Ask any Grade 5 teacher which of the two following word problems is more challenging for students:

- There are 34.6 kilograms of sand and 3 kilograms more gravel than sand. What is the total weight of the gravel and sand?*
- There are 34.6 kilograms of sand and 3 times as much gravel. What is the total weight of the gravel and the sand?*

Problem (a) is more challenging because of the language of *more than*. Students consistently struggle to reason about the relationship of quantities, often resorting to using ineffective tricks (e.g., “If the problem says *more than*, subtract,” which is not correct in the sand and gravel problem). Module 3 in Kindergarten is intended to provide a solid foundation to future comparison work in the meaningful context of measurement.

In Module 4, comparison flows into addition and subtraction, as it does in all the elementary grades (e.g., “7 is more than 3” leads to, “ $7 = 3 + 4$,” and “ $3 + 4 = 7$ ”). Students represent *add to*, *take away*, and *put together* stories with blocks, drawings, and equations. Toward the end of the module,

students start to reorient from 5 toward 10 ones with “How much more does 7 need to make ten?” These final lessons set the stage for Module 5 wherein 10 ones is the structure on which students build the teen numbers. They are also critical foundation standards for Grade 1. Students must know how much a number needs to make ten in order to use the *make ten* strategy in Grades 1 and 2, shown to be an important route to place value understanding as they master their sums and differences to 20 by the end of Grade 2.

In Module 5, after an extended experience of addition and subtraction with totals up to 10, students progress to investigating numbers 10–20. For example, thirteen beans are decomposed as 10 beans and 3 beans just as 8 beans are decomposed as 5 beans and 3 beans. Students record their decompositions of the teen numbers as equations, $13 = 10 + 3$, and start to think, “10. 3 more is 13.” As mentioned at the beginning of the story in Grade 1, the unit *one* is introduced as students learn to think of the teen numbers as 10 ones and some ones. For the first time, *one* is not an object but rather a noun! Notice how this sets the stage for expanded form in the upper grades (e.g., $36 = 30 + 6$, or $13.6 = 10 + 3 + 0.6$).

Module 6 rounds out the year with an exploration of shapes. Students build shapes from components, analyze and compare them, and discover that they can be composed of smaller shapes, just as larger numbers are composed of smaller numbers.

Alignment Chart⁹

Module and Approximate Number of Instructional Days	Standards Addressed in Kindergarten Modules
Module 1: Numbers to 10 ¹⁰ (43 days)	<p>Know number names and the count sequence.¹¹</p> <p>K.CC.3 Write numbers from 0 to 20. Represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects).</p> <p>Count to tell the number of objects.¹²</p> <p>K.CC.4 Understand the relationship between numbers and quantities; connect counting to cardinality.</p> <p>a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.</p>

⁹When a cluster is referred to in this chart without a footnote, the cluster is addressed in its entirety.

¹⁰In this module, standards work is limited to within 10.

¹¹The balance of this cluster is addressed in Module 5.

¹²K.CC.4d is addressed in Module 6.

Module and Approximate Number of Instructional Days	Standards Addressed in Kindergarten Modules
	<p>b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.</p> <p>c. Understand that each successive number name refers to a quantity that is one larger.</p> <p>K.CC.5 Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.</p> <p>Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.¹³</p> <p>K.OA.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).</p> <p>Classify objects and count the number of objects in each category.</p> <p>K.MD.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (Limit category counts to be less than or equal to 10.)</p>
<p>Module 2: Two-Dimensional and Three-Dimensional Shapes (12 days)</p>	<p>Classify objects and count the number of objects in each category.</p> <p>K.MD.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (Limit category counts to be less than or equal to 10.)</p> <p>Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).</p> <p>K.G.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as <i>above</i>, <i>below</i>, <i>beside</i>, <i>in front of</i>, <i>behind</i>, and <i>next to</i>.</p> <p>K.G.2 Correctly name shapes regardless of their orientations or overall size.</p>

¹³The balance of this cluster is addressed in Module 4.

Module and Approximate Number of Instructional Days	Standards Addressed in Kindergarten Modules
	<p>KG.3 Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).</p> <p>Analyze, compare, create, and compose shapes.¹⁴</p> <p>KG.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”) and other attributes (e.g., having sides of equal length).</p>
<p>Module 3: Comparison of Length, Weight, Capacity, and Numbers to 10 (38 days)</p>	<p>Compare numbers.</p> <p>K.CC.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. (Include groups with up to ten objects.)</p> <p>K.CC.7 Compare two numbers between 1 and 10 presented as written numerals.</p> <p>Describe and compare measurable attributes.</p> <p>K.MD.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.</p> <p>K.MD.2 Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. <i>For example, directly compare the heights of two children and describe one child as taller/shorter.</i></p>
<p>Module 4: Number Pairs, Addition and Subtraction to 10 (47 days)</p>	<p>Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.</p> <p>K.OA.1 Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. (Drawings need not show details, but should show the mathematics in the problem.)</p> <p>K.OA.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.</p>

¹⁴The balance of this cluster is addressed in Module 6.

Module and Approximate Number of Instructional Days	Standards Addressed in Kindergarten Modules
	<p>K.OA.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).</p> <p>K.OA.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings and record the answer with a drawing or equation.</p> <p>K.OA.5 Fluently add and subtract within 5.¹⁵</p>
<p>Module 5: Numbers 10–20 and Counting to 100 (30 days)</p>	<p>Know number names and the count sequence.</p> <p>K.CC.1 Count to 100 by ones and by tens.</p> <p>K.CC.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1).</p> <p>K.CC.3 Write numbers from 0 to 20. Represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects).</p> <p>Count to tell the number of objects.¹⁶</p> <p>K.CC.4 Understand the relationship between numbers and quantities; connect counting to cardinality.</p> <p>b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.</p> <p>c. Understand that each successive number name refers to a quantity that is one larger.</p> <p>K.CC.5 Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.</p>

¹⁵ From this point forward, fluency practice is part of students’ on-going experience.

¹⁶ K.CC.4a, K.CC.4b, and K.CC.4c are addressed in Module 1; K.CC.4d is addressed in Module 6.

Module and Approximate Number of Instructional Days	Standards Addressed in Kindergarten Modules
	<p>Work with numbers 11–19 to gain foundations for place value.</p> <p>K.NBT.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings and record each composition or decomposition by a drawing or equation (such as $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two three, four, five, six, seven, eight or nine ones.</p>
<p>Module 6: Analyzing, Comparing, and Composing Shapes (10 days)</p>	<p>Count to tell the number of objects.¹⁷</p> <p>K.CC.4 Understand the relationship between numbers and quantities: connect counting to cardinality.</p> <p>d. Develop understanding of ordinal numbers (first through tenth) to describe the relative position and magnitude of whole numbers.¹⁸</p> <p>Analyze, compare, create and compose shapes.¹⁹</p> <p>K.G.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.</p> <p>K.G.6 Compose simple shapes to form larger shapes. <i>For example, “Can you join these two triangles with full sides touching to make a rectangle?”</i></p>

¹⁷ Ordinality is introduced in the context of constructing and manipulating shapes. The balance of this cluster is addressed in Modules 1 and 5.

¹⁸ K.CC.4d originates from the New York State Common Core Learning Standards and is not part of the CCSS-M.

¹⁹ K.G.4 is addressed in Module 2.

Sequence of Grade 1 Modules Aligned with the Standards

Module 1: Sums and Differences to 10

Module 2: Introduction to Place Value Through Addition and Subtraction Within 20

Module 3: Ordering and Comparing Length Measurements as Numbers

Module 4: Place Value, Comparison, Addition and Subtraction to 40

Module 5: Identifying, Composing, and Partitioning Shapes

Module 6: Place Value, Comparison, Addition and Subtraction to 100

Summary of Year

Grade 1 mathematics is about (1) developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; (2) developing understanding of whole number relationships and place value, including grouping in tens and ones; (3) developing understanding of linear measurement and measuring lengths as iterating length units; and (4) reasoning about attributes of, and composing and decomposing geometric shapes.

Key Areas of Focus for K–2: Addition and subtraction—concepts, skills, and problem solving

Required Fluency: 1.OA.6 Add and subtract within 10.

Major Emphasis Clusters

Operations and Algebraic Thinking

- Represent and solve problems involving addition and subtraction.
- Understand and apply properties of operations and the relationship between addition and subtraction.
- Add and subtract within 20.
- Work with addition and subtraction equations.

Number and Operations in Base Ten

- Extend the counting sequence.
- Understand place value.
- Use place value understanding and properties of operations to add and subtract.

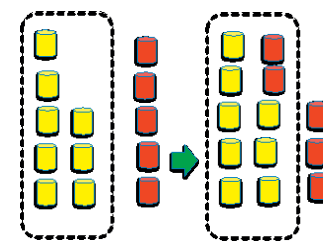
Measurement and Data

- Measure lengths indirectly and by iterating length units.

Rationale for Module Sequence in Grade 1

In Grade 1, work with numbers to 10 continues to be a major stepping-stone in learning the place value system. In Module 1, students work to further understand the meaning of addition and subtraction begun in Kindergarten, largely within the context of the Grade 1 word problem types. They begin intentionally and energetically building fluency with addition and subtraction facts—a major gateway to later grades.

In Module 2, students add and subtract within 20. Work begins by modeling *adding and subtracting across ten* in word problems and with equations. Solutions involving decomposition and composition like that shown to the right for $8 + 5$ reinforce the need to *make 10*. In Module 1, students grouped 10 objects, saw numbers 0 to 9 in relationship to ten, added to make ten, and subtracted from ten. They now transition to conceptualizing that ten as a single unit (e.g., using 10 linking cubes stuck together). This is the next major stepping-stone in understanding place value, learning to group *10 ones* as a single unit: 1 ten. Learning to *complete a unit* empowers students in later grades to understand *renaming* in the addition algorithm, to add 298 and 35 mentally (i.e., $298 + 2 + 33$), and to add measurements like 4 m, 80 cm, and 50 cm (i.e., $4 \text{ m} + 80 \text{ cm} + 20 \text{ cm} + 30 \text{ cm} = 4 \text{ m} + 1 \text{ m} + 30 \text{ cm} = 5 \text{ m } 30 \text{ cm}$).



$$8 + 5 = 8 + (2 + 3) = (8 + 2) + 3 = 10 + 3 = 13$$

Adding Across a Ten

Module 3, which focuses on measuring and comparing lengths indirectly and by iterating length units, gives students a few weeks to practice and internalize *making a 10* during daily fluency activities.

Module 4 returns to understanding place value. Addition and subtraction within 40 rest on firmly establishing a *ten* as a unit that can be counted, first introduced at the close of Module 2. Students begin to see a problem like $23 + 6$ as an opportunity to separate the 2 tens in 23 and concentrate on the familiar addition problem $3 + 6$. Adding $8 + 5$ is related to solving $28 + 5$; complete a unit of ten and add 3 more.

In Module 5, students think about attributes of shapes and practice composing and decomposing geometric shapes. They also practice working with addition and subtraction within 40 during daily fluency activities (from Module 4). Thus, this module provides important internalization time for students between two intense number-based modules. The module placement also gives more spatially-oriented students the opportunity to build their confidence before they return to arithmetic.

Although Module 6 focuses on *adding and subtracting within 100*, the learning goal differs from the *within 40* module. Here, the new level of complexity is to build off the place value understanding and mental math strategies that were introduced in earlier modules. Students explore by using simple examples and the familiar units of 10 made out of linking cubes, bundles, and drawings. Students also count to 120 and represent any number within that range with a numeral.

Alignment Chart²⁰

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 1 Modules
<p>Module 1: Sums and Differences to 10²¹ (45 days)</p>	<p>Represent and solve problems involving addition and subtraction.²²</p> <p>1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart and comparing, with unknowns in all positions, e.g., by using objects, drawings and equations with a symbol for the unknown number to represent the problem. (See Standards Glossary, Table 1.)</p> <p>Understand and apply properties of operations and the relationship between addition and subtraction.</p> <p>1.OA.3 Apply properties of operations as strategies to add and subtract. (Students need not use formal terms for these properties.) <i>Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)</i></p> <p>1.OA.4 Understand subtraction as an unknown-addend problem. <i>For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.</i></p> <p>Add and subtract within 20.</p> <p>1.OA.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).</p> <p>1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).</p>

²⁰ When a cluster is referred to in this chart without a footnote, the cluster is addressed in its entirety.

²¹ In this module, work is limited to within 10.

²² 1.OA.2 is addressed in Module 2.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 1 Modules
	<p>Work with addition and subtraction equations.</p> <p>1.OA.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. <i>For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.</i></p> <p>1.OA.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = _ - 3$, $6 + 6 = _$.</i></p>
<p>Module 2: Introduction to Place Value Through Addition and Subtraction Within 20 (35 days)</p>	<p>Represent and solve problems involving addition and subtraction.</p> <p>1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. (See Standards Glossary, Table 1.)</p> <p>1.OA.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</p> <p>Understand and apply properties of operations and the relationship between addition and subtraction.</p> <p>1.OA.3 Apply properties of operations as strategies to add and subtract. (Students need not use formal terms for these properties.) <i>Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)</i></p> <p>1.OA.4 Understand subtraction as an unknown-addend problem. <i>For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.</i></p>

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 1 Modules
	<p>Add and subtract within 20.²³</p> <p>1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).</p> <p>Understand place value.²⁴</p> <p>1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:</p> <ol style="list-style-type: none"> 10 can be thought of as a bundle of ten ones—called a “ten.” The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
<p>Module 3: Ordering and Comparing Length Measurements as Numbers (15 days)</p>	<p>Represent and solve problems involving addition and subtraction.²⁵</p> <p>1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. (See Standards Glossary, Table 1.)</p> <p>Measure lengths indirectly and by iterating length units.</p> <p>1.MD.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.</p>

²³ From this point forward, fluency practice is part of students’ on-going experience; the balance of this cluster is addressed in Module 1.

²⁴ Focus in this module is on numbers to 20. The balance of this cluster is addressed in Modules 4 and 6.

²⁵ The balance of this cluster is addressed in Module 2.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 1 Modules
	<p>1.MD.2 Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. <i>Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.</i></p> <p>Represent and interpret data.</p> <p>1.MD.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.</p>
<p>Module 4: Place Value, Comparison, Addition and Subtraction to 40 ²⁶ (35 days)</p>	<p>Represent and solve problems involving addition and subtraction.²⁷</p> <p>1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. (See Standards Glossary, Table 1.)</p> <p>Extend the counting sequence.²⁸</p> <p>1.NBT.1 Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.</p> <p>Understand place value.²⁹</p> <p>1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:</p> <ol style="list-style-type: none"> 10 can be thought of as a bundle of ten ones—called a “ten.”

²⁶ While pennies and dimes are used throughout the module, 1.MD.3 is not a focus grade level standard in Module 4. Instead, this standard becomes a focal standard in Module 6, when all coins are introduced and used.

²⁷ The balance of this cluster is addressed in Module 2.

²⁸ Focus on numbers to 40.

²⁹ Focus on numbers to 40; 1.NBT.2b is addressed in Module 2.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 1 Modules
	<p>c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).</p> <p>1.NBT.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.</p> <p>Use place value understanding and properties of operations to add and subtract.³⁰</p> <p>1.NBT.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.</p> <p>1.NBT.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.</p> <p>1.NBT.6 Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p>
<p>Module 5: Identifying, Composing, and Partitioning Shapes (15 days)</p>	<p>Tell and write time and money.³¹</p> <p>1.MD.3 Tell and write time in hours and half-hours using analog and digital clocks. Recognize and identify coins, their names, and their value.</p> <p>Reason with shapes and their attributes.</p> <p>1.G.1 Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.</p>

³⁰ Focus on numbers to 40.

³¹ Time alone is addressed in this module. Although money is not addressed until Grade 2 in the CCSS-M, it is addressed in Grade 1 Module 6.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 1 Modules
	<p>1.G.2 Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. (Students do not need to learn formal names such as “right rectangular prism.”)</p> <p>1.G.3 Partition circles and rectangles into two and four equal shares, describe the shares using the words <i>halves</i>, <i>fourths</i>, and <i>quarters</i>, and use the phrases <i>half of</i>, <i>fourth of</i>, and <i>quarter of</i>. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.</p>
<p>Module 6: Place Value, Comparison, Addition and Subtraction to 100 (35 days)</p>	<p>Represent and solve problems involving addition and subtraction.³²</p> <p>1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. (See Standards Glossary, Table 1.)</p> <p>Extend the counting sequence.</p> <p>1.NBT.1 Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.</p> <p>Understand place value.³³</p> <p>1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:</p> <ol style="list-style-type: none"> a. 10 can be thought of as a bundle of ten ones—called a “ten.” c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).

³²The balance of this cluster is addressed in Module 2.

³³1.NBT.2b is addressed in Module 2.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 1 Modules
	<p>1.NBT.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.</p> <p>Use place value understanding and properties of operations to add and subtract.</p> <p>1.NBT.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.</p> <p>1.NBT.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count: explain the reasoning used.</p> <p>1.NBT.6 Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p> <p>Tell and write time and money.³⁴</p> <p>1.MD.3 Tell and write time in hours and half-hours using analog and digital clocks. Recognize and identify coins, their names, and their value.</p>

³⁴ Although money is not addressed until Grade 2 in the CCSS-M, money is addressed in this module. Time is addressed in Module 5.

Sequence of Grade 2 Modules Aligned with the Standards

Module 1: Sums and Differences to 100

Module 2: Addition and Subtraction of Length Units

Module 3: Place Value, Counting, and Comparison of Numbers to 1,000

Module 4: Addition and Subtraction Within 200 with Word Problems to 100

Module 5: Addition and Subtraction Within 1,000 with Word Problems to 100

Module 6: Foundations of Multiplication and Division

Module 7: Problem Solving with Length, Money, and Data

Module 8: Time, Shapes, and Fractions as Equal Parts of Shapes

Summary of Year

Grade 2 mathematics is about (1) extending understanding of base-ten notation; (2) building fluency with addition and subtraction; (3) using standard units of measure; and (4) describing and analyzing shapes.

Key Areas of Focus for K–2: Addition and subtraction—concepts, skills, and problem solving

Required Fluency:

2.OA.2	Add and subtract within 20.
2.NBT.5	Add and subtract within 100.

Major Emphasis Clusters

Operations and Algebraic Thinking

- Represent and solve problems involving addition and subtraction.
- Add and subtract within 20.

Number and Operations in Base Ten

- Understand place value.
- Use place value understanding and properties of operations to add and subtract.

Measurement and Data

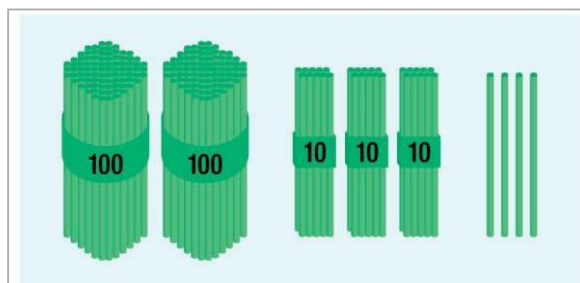
- Measure and estimate lengths in standard units.
- Relate addition and subtraction to length.

Rationale for Module Sequence in Grade 2

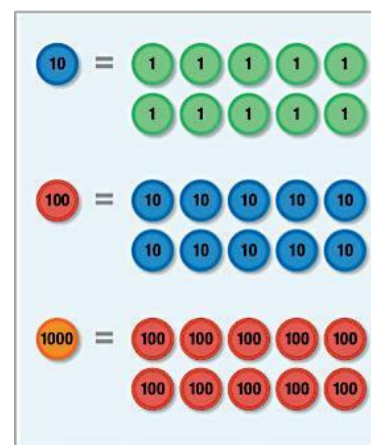
From Grade 1, students have fluency of addition and subtraction within 10 and extensive experience working with numbers to 100. Module 1 of Grade 2 establishes a motivating, differentiated fluency program in the first few weeks that will provide each student with enough practice to achieve mastery of the new required fluencies (i.e., adding and subtracting within 20 and within 100) by the end of the year. Students also solve all addition and subtraction word problem situations (See the Standards Glossary, Table 1) that do not involve comparison using the Read-Draw-Write process, a practice that will also continue throughout the year. Though encouraged to use math drawings that are intuitive for them, each situation is also modeled using the tape diagram, encouraging students to generalize and analyze part–whole relationships.

In Module 2, students learn to measure and estimate using standard units for length and solve measurement problems involving addition and subtraction of length, now encountering the word problem situations involving comparison. A major objective is for students to use measurement tools with the understanding that linear measure involves an iteration of units and that the smaller a unit, the more iterations are necessary to cover a given length. Students work exclusively with metric units (e.g., centimeters and meters) in this module to support upcoming work with place value concepts in Module 3. Units also play a central role in the addition and subtraction algorithms of Modules 4 and 5. An underlying goal for this module is for students to learn the meaning of a *unit* in a different context, that of length. This understanding serves as the foundation of arithmetic, measurement, and geometry in elementary school. Students also solve word problems involving all addition and subtraction comparison situations, so that by the end of Module 2, they have encountered the full set of situations.

All arithmetic algorithms are manipulations of place value units: ones, tens, hundreds, etc. In Module 3, students extend their understanding of base-ten notation and apply their understanding of place value to count and compare numbers to 1,000. In Grade 2, the place value units move from a proportional model to a non-proportional number disk model (see the pictures below). The place value table with number disks can be used through Grade 5 for modeling very large numbers and decimals, thus providing students greater facility with, and understanding of, mental math and algorithms.



Proportional Model for Place Value



Non-Proportional Model for Place Value

In Module 4, students apply their work with place value units to add and subtract within 200, moving from concrete to pictorial to abstract. This work deepens their understanding of base ten, place value, and the properties of operations. It also challenges them to apply their knowledge to one-step and two-step word problems. During this module, students also continue to develop one of the required fluencies of the grade: addition and subtraction within 100.

Module 5 builds upon the work of Module 4. Students again use place value strategies, manipulatives, and math drawings to extend their conceptual understanding of the addition and subtraction algorithms to numbers within 1,000. They maintain addition and subtraction fluency within 100 through daily application work to solve one- and two-step word problems of all types. A key component of Modules 4 and 5 is that students use place value reasoning to explain why their addition and subtraction strategies work.

In Module 6, students extend their understanding of a unit to build the foundation for multiplication and division wherein any number, not just powers of ten, can be a unit. Making equal groups of *four apples each* establishes the unit *four apples* (or just *four*) that can then be counted: *1 four, 2 fours, 3 fours*, etc. Relating the new unit to the one used to create it lays the foundation for multiplication: *3 groups of 4 apples equal 12 apples* (or *3 fours is 12*).

Module 7 provides another opportunity for students to practice their algorithms and problem-solving skills with perhaps the most well-known, interesting units of all: dollars, dimes, pennies, quarters, and nickels. Measuring and estimating length is revisited in this module in the context of units from both the customary system (e.g., inches and feet) and the metric system (e.g., centimeters and meters). As they study money and length, students represent data given by measurement and money data using picture graphs, bar graphs, and line plots.

Students finish Grade 2 by describing and analyzing shapes in terms of their sides and angles. In Module 8, students investigate, describe, and reason about the composition and decomposition of shapes to form other shapes. Through building, drawing, and analyzing two- and three-dimensional shapes, students develop a foundation for understanding area, volume, congruence, similarity, and symmetry in later grades.

Alignment Chart³⁵

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 2 Modules
<p>Module 1: Sums and Differences to 100 (10 days)</p>	<p>Represent and solve problems involving addition and subtraction.³⁶</p> <p>2.OA.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. (See Standards Glossary, Table 1.)</p> <p>Add and subtract within 20.³⁷</p> <p>2.OA.2 Fluently add and subtract within 20 using mental strategies. (See standard 1.OA.6 for a list of mental strategies.) By end of Grade 2, know from memory all sums of two one-digit numbers.</p> <p>Use place value understanding and properties of operations to add and subtract.³⁸</p> <p>2.NBT.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p>
<p>Module 2: Addition and Subtraction of Length Units (12 days)</p>	<p>Measure and estimate lengths in standard units.³⁹</p> <p>2.MD.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.</p> <p>2.MD.2 Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.</p> <p>2.MD.3 Estimate lengths using units of inches, feet, centimeters, and meters.</p>

³⁵ When a cluster is referred to in this chart without a footnote, the cluster is addressed in its entirety.

³⁶ In this module, word problems focus primarily on result unknown and change unknown situations.

³⁷ From this point forward, fluency practice with addition and subtraction to 20 is part of students' ongoing experience.

³⁸ This standard is addressed again in Modules 4 and 7; the balance of this cluster is addressed in Modules 4 and 5.

³⁹ Focus is on metric measurement in preparation for place value in Module 3. Customary measurement is addressed in Module 7.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 2 Modules
	<p>2.MD.4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.</p> <p>Relate addition and subtraction to length.</p> <p>2.MD.5 Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.</p> <p>2.MD.6 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.</p>
<p>Module 3: Place Value, Counting, and Comparison of Numbers to 1,000 (25 days)</p>	<p>Understand place value.</p> <p>2.NBT.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:</p> <ol style="list-style-type: none"> 100 can be thought of as a bundle of ten tens—called a “hundred.” The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones). <p>2.NBT.2 Count within 1000; skip-count by 5s⁴⁰, 10s, and 100s.</p> <p>2.NBT.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.</p> <p>2.NBT.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p>

⁴⁰ Use an analog clock to provide a context for skip-counting by fives.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 2 Modules
<p>Module 4: Addition and Subtraction Within 200 with Word Problems to 100 (35 days)</p>	<p>Represent and solve problems involving addition and subtraction.</p> <p>2.OA.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. (See Standards Glossary, Table 1.)</p> <p>Use place value understanding and properties of operations to add and subtract.⁴¹</p> <p>2.NBT.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p> <p>2.NBT.6 Add up to four two-digit numbers using strategies based on place value and properties of operations.</p> <p>2.NBT.7 Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.</p> <p>2.NBT.8 Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.</p> <p>2.NBT.9 Explain why addition and subtraction strategies work, using place value and the properties of operations. (Explanations may be supported by drawings or objects.)</p>
<p>Module 5: Addition and Subtraction Within 1,000 with Word Problems to 100 (24 days)</p>	<p>Use place value understanding and properties of operations to add and subtract.⁴²</p> <p>2.NBT.7 Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is</p>

⁴¹ In this module, work is limited to within 200. This work is extended to numbers within 1,000 in the next module.

⁴² The balance of this cluster is addressed in Modules 1, 4, and 7.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 2 Modules
	<p>necessary to compose or decompose tens or hundreds.</p> <p>2.NBT.8 Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.</p> <p>2.NBT.9 Explain why addition and subtraction strategies work, using place value and the properties of operations. (Explanations may be supported by drawings or objects.)</p>
<p>Module 6: Foundations of Multiplication and Division (24 days)</p>	<p>Work with equal groups of objects to gain foundations for multiplication.</p> <p>2.OA.3 Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.</p> <p>2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.</p> <p>Reason with shapes and their attributes.⁴³</p> <p>2.G.2 Partition a rectangle into rows and columns of same size squares and count to find the total number of them.</p>
<p>Module 7: Problem Solving with Length, Money, and Data (30 days)</p>	<p>Use place value understanding and properties of operations to add and subtract.⁴⁴</p> <p>2.NBT.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p> <p>Measure and estimate lengths in standard units.</p> <p>2.MD.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.</p>

⁴³ 2.G.2 is included in this module because the array model is so important to the foundation for multiplication. The balance of this cluster is addressed in Module 8.

⁴⁴ This standard is also addressed in Modules 1 and 4; the balance of this cluster is addressed in Modules 4 and 5.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 2 Modules
	<p>2.MD.2 Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.</p> <p>2.MD.3 Estimate lengths using units of inches, feet, centimeters, and meters.</p> <p>2.MD.4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.</p> <p>Relate addition and subtraction to length.</p> <p>2.MD.5 Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.</p> <p>2.MD.6 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.</p> <p>Work with time and money.⁴⁵</p> <p>2.MD.8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. <i>Example: If you have 2 dimes and 3 pennies, how many cents do you have?</i></p> <p>Represent and interpret data.</p> <p>2.MD.9 Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.</p> <p>2.MD.10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems (See Standards Glossary, Table 1.) using information presented in a bar graph.</p>

⁴⁵Focus on money. Time is addressed in Module 8.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 2 Modules
<p>Module 8: Time, Shapes, and Fractions as Equal Parts of Shapes (20 days)</p>	<p>Work with time and money.⁴⁶</p> <p>2.MD.7 Tell time and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.</p> <p>Reason with shapes and their attributes.⁴⁷</p> <p>2.G.1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. (Sizes are compared directly or visually, not compared by measuring.) Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.</p> <p>2.G.3 Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words <i>halves</i>, <i>thirds</i>, <i>half of</i>, <i>a third of</i>, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.</p>

⁴⁶ Focus on time. Money is addressed in Module 7.

⁴⁷ 2.G.2 is addressed in Module 6.

Sequence of Grade 3 Modules Aligned with the Standards

Module 1: Properties of Multiplication and Division and Solving Problems with Units of 2–5 and 10

Module 2: Place Value and Problem Solving with Units of Measure

Module 3: Multiplication and Division with Units of 0, 1, 6–9, and Multiples of 10

Module 4: Multiplication and Area

Module 5: Fractions as Numbers on the Number Line

Module 6: Collecting and Displaying Data

Module 7: Geometry and Measurement Word Problems

Summary of Year

Grade 3 mathematics is about (1) developing understanding of multiplication and division and strategies for multiplication and division within 100; (2) developing understanding of fractions, especially unit fractions (fractions with a numerator of 1); (3) developing understanding of the structure of rectangular arrays and of area; and (4) describing and analyzing two-dimensional shapes.

Key Areas of Focus for 3–5: Multiplication and division of whole numbers and fractions—concepts, skills, and problem solving

Required Fluency: 3.OA.7 Multiply and divide within 100.
3.NBT.2 Add and subtract within 1000.

Major Emphasis Clusters

Operations and Algebraic Thinking

- Represent and solve problems involving multiplication and division.
- Understand the properties of multiplication and the relationship between multiplication and division.
- Multiply and divide within 100.
- Solve problems involving the four operations and identify and explain patterns in arithmetic.

Number and Operations—Fractions

- Develop understanding of fractions as numbers.

Measurement and Data

- Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.
- Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

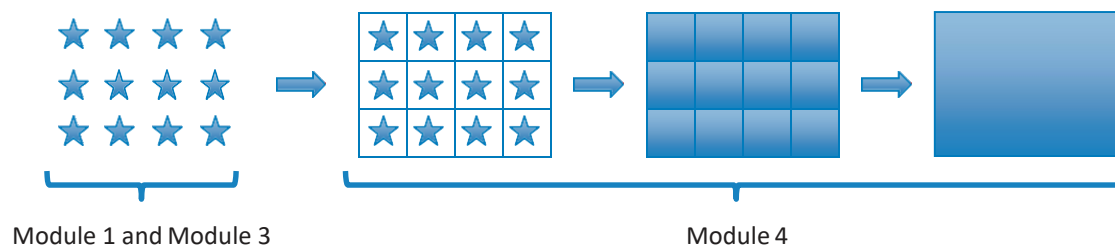
Rationale for Module Sequence in Grade 3

The first module builds upon the foundation of multiplicative thinking with units started in Grade 2. First, students concentrate on the meaning of multiplication and division and begin developing fluency for learning products involving factors of 2, 3, 4, 5, and 10 (see Key Areas of Focus and

Required Fluency above). The restricted set of facts keeps learning manageable, and also provides enough examples to do one- and two-step word problems and to start measurement problems involving weight, capacity, and time in the second module.

Module 2 focuses on measurement of time and metric weight and capacity. In exploratory lessons, students decompose a kilogram into 100 gram, 10 gram, and 1 gram weights and decompose a liter into analogous amounts of milliliters. Metric measurement thereby develops the concept of mixed units (e.g., 3 kilograms 400 grams is clearly related to 3 thousands, 4 hundreds). Students then apply their new understanding of number to place value, comparison and rounding, composing larger units when adding, decomposing into smaller units when subtracting. Students also draw proportional tape diagrams to solve word problems (e.g., “If this tape represents 62 kg, then a tape representing 35 kg needs to be slightly longer than half the 62 kg bar ...”). Drawing the relative sizes of the lengths involved in the model prepares students to locate fractions on a number line in Module 5 (where they learn to locate points on the number line relative to each other and relative to the whole unit). Module 2 also provides students with internalization time for learning the 2, 3, 4, 5, and 10 facts as part of their fluency activities.

Students learn the remaining multiplication and division facts in Module 3 as they continue to develop their understanding of multiplication and division strategies within 100 and use those strategies to solve two-step word problems. The “2, 3, 4, 5, and 10 facts” module (Module 1) and the “0, 1, 6, 7, 8, 9, and multiples of 10 facts” module (Module 3) both provide important, sustained time for work in understanding the structure of rectangular arrays to prepare students for area in Module 4. This work is necessary because students initially find it difficult to distinguish the different units in a grid (the third array in the picture below), count them, and recognize that the count is related to multiplication. Tiling also supports a correct interpretation of the grid. Modules 1 and 3 slowly build up to the area model (the fourth model in the picture below), using rectangular arrays in the context of learning multiplication and division:



Progression from Rectangular Array to Area Model

By Module 4, students are ready to investigate area. They measure the area of a shape by finding the total number of same-size units of area (e.g., tiles) required to cover the shape without gaps or overlaps. When that shape is a rectangle with whole number side lengths, it is easy to partition the rectangle into squares with equal areas (as in the third stage of the illustration above).

One goal of Module 5 is for students to transition from thinking of fractions as area or parts of a figure to points on a number line and finally, as numbers. To make that jump, students think of fractions as being constructed out of unit fractions: *1 fourth* is the length of a segment on the number line such that the length of four concatenated fourth segments on the line equals 1 (the whole). Once the unit *1 fourth* has been established, counting them is as easy as counting whole numbers: 1 fourth, 2 fourths, 3 fourths, 4 fourths, 5 fourths, etc. Students also compare fractions, find equivalent fractions in special cases, and solve problems that involve fractions. They realize that equivalent fractions share the same point on the number line.

In Module 6, by applying their knowledge of fractions from Module 5, students round lengths to the nearest halves and fourths of an inch and record that information on line plots. This module also prepares students for the multiplicative comparison problems of Grade 4 by asking students “how many more” and “how many less” questions about scaled bar graphs.

The year rounds out with plenty of time to solve two-step word problems involving the four operations and to improve fluency for concepts and skills initiated earlier in the year. In Module 7, students also describe, analyze, and compare properties of two-dimensional shapes. By now, students have done enough work with both linear and area measurement models to understand that there is no relationship in general between the area of a figure and its perimeter, which is one of the concepts taught in the last module.

Alignment Chart⁴⁸

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 3 Modules
Module 1: Properties of Multiplication and Division and Solving Problems with Units of 2–5 and 10 (25 days)	Represent and solve problems involving multiplication and division.⁴⁹ 3.OA.1 Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. <i>For example, describe a context in which a total number of objects can be expressed as 5×7.</i> 3.OA.2 Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. <i>For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$.</i>

⁴⁸ When a cluster is referred to in this chart without a footnote, the cluster is addressed in its entirety.

⁴⁹ In this module, work is limited to factors of 2–5 and 10 and the corresponding dividends.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 3 Modules
	<p>3.OA.3 Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. (See Standards Glossary, Table 2.)</p> <p>3.OA.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = _ \div 3$, $6 \times 6 = ?$</i></p> <p>Understand properties of multiplication and the relationship between multiplication and division.⁵⁰</p> <p>3.OA.5 Apply properties of operations as strategies to multiply and divide. (Students need not use formal terms for these properties.) <i>Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)⁵¹</i></p> <p>3.OA.6 Understand division as an unknown-factor problem. <i>For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.</i></p> <p>Multiply and divide within 100.⁵²</p> <p>3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.</p> <p>Solve problems involving the four operations, and identify and explain patterns in arithmetic.⁵³</p> <p>3.OA.8 Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. (This standard</p>

⁵⁰ In this module, work is limited to factors of 2–5 and 10 and the corresponding dividends.

⁵¹ The associative property is addressed in Module 3.

⁵² In this module, work is limited to factors of 2–5 and 10 and the corresponding dividends.

⁵³In this module, problem solving is limited to multiplication and division and limited to factors of 2–5 and 10 and the corresponding dividends. 3.OA.9 is addressed in Module 3.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 3 Modules
	<p>is limited to problems posed with whole numbers and having whole-number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order, i.e., Order of Operations.)</p>
<p>Module 2: Place Value and Problem Solving with Units of Measure (25 days)</p>	<p>Use place value understanding and properties of operations to perform multi-digit arithmetic.⁵⁴</p> <p>3.NBT.1 Use place value understanding to round whole numbers to the nearest 10 or 100.</p> <p>3.NBT.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.</p> <p>Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.</p> <p>3.MD.1 Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.</p> <p>3.MD.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). (Excludes compound units such as cm^3 and finding the geometric volume of a container.) Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem. (Excludes multiplicative comparison problems, i.e., problems involving notions of “times as much”; see Standards Glossary, Table 2.)</p>

⁵⁴ From this point forward, fluency practice with addition and subtraction is part of students’ on-going experience. 3.NBT.3 is addressed in Module 3.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 3 Modules
<p>Module 3: Multiplication and Division with Units of 0, 1, 6–9, and Multiples of 10 (25 days)</p>	<p>Represent and solve problems involving multiplication and division.⁵⁵</p> <p>3.OA.3 Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. (See Standards Glossary, Table 2.)</p> <p>3.OA.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = ___ \div 3$, $6 \times 6 = ?$</i></p> <p>Understand properties of multiplication and the relationship between multiplication and division.⁵⁶</p> <p>3.OA.5 Apply properties of operations as strategies to multiply and divide. (Students need not use formal terms for these properties.) <i>Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)</i></p> <p>Multiply and divide within 100.⁵⁷</p> <p>3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.</p> <p>Solve problems involving the four operations, and identify and explain patterns in arithmetic.⁵⁸</p> <p>3.OA.8 Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. (This standard is limited to problems posed with whole numbers and having whole-number answers; students</p>

⁵⁵The balance of this cluster is addressed in Module 1.

⁵⁶The balance of this cluster is addressed in Module 1.

⁵⁷From this point forward, fluency practice with multiplication and division facts is part of students' on-going experience.

⁵⁸ After being fully taught in Module 3, this standard (as well as 3.OA.3) continues being practiced throughout the remainder of the school year.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 3 Modules
	<p>should know how to perform operations in the conventional order when there are no parentheses to specify a particular order, i.e., Order of Operations.)</p> <p>3.OA.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. <i>For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.</i></p> <p>Use place value understanding and properties of operations to perform multi-digit arithmetic. (A range of algorithms may be used.)⁵⁹</p> <p>3.NBT.3 Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80, 5×60) using strategies based on place value and properties of operations.</p>
<p>Module 4: Multiplication and Area (20 days)</p>	<p>Geometric measurement: understand concepts of area and relate area to multiplication and to addition.</p> <p>3.MD.5 Recognize area as an attribute of plane figures and understand concepts of area measurement.</p> <ol style="list-style-type: none"> A square with side length 1 unit, called “a unit square,” is said to have “one square unit” of area, and can be used to measure area. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units. <p>3.MD.6 Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).</p> <p>3.MD.7 Relate area to the operations of multiplication and addition.</p> <ol style="list-style-type: none"> Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths. Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.

⁵⁹The balance of this cluster is addressed in Module 2.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 3 Modules
	<ul style="list-style-type: none"> c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning. d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.
<p>Module 5: Fractions as Numbers on the Number Line (35 days)</p>	<p>Develop understanding of fractions as numbers. (Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.)</p> <ul style="list-style-type: none"> 3.NF.1 Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$. 3.NF.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram. <ul style="list-style-type: none"> a. Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line. b. Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line. 3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. <ul style="list-style-type: none"> a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. b. Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$, $4/6 = 2/3$. Explain why the fractions are equivalent, e.g., by using a visual fraction model.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 3 Modules
	<p>c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. <i>Examples: Express 3 in the form $3 = 3/1$; recognize that $6/1 = 6$; locate $4/4$ and 1 at the same point of a number line diagram.</i></p> <p>d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.</p> <p>Reason with shapes and their attributes.⁶⁰</p> <p>3.G.2 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area and describe the area of each part as $\frac{1}{4}$ of the area of the shape.</p>
<p>Module 6: Collecting and Displaying Data (10 days)</p>	<p>Represent and interpret data.</p> <p>3.MD.3 Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two- step “how many more” and “how many less” problems using information presented in scaled bar graphs. <i>For example, draw a bar graph in which each square in the bar graph might represent 5 pets.</i></p> <p>3.MD.4 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.</p>
<p>Module 7: Geometry and Measurement Word Problems⁶¹ (40 days)</p>	<p>Solve problems involving the four operations, and identify and explain patterns in arithmetic.⁶²</p> <p>3.OA.8 Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. (This standard</p>

⁶⁰ 3.G.1 is addressed in Module 7.

⁶¹ The seemingly eclectic set of standards in Module 7 allows for a new level of word problems, including perimeter and measurement word problems.

⁶² 3.OA.9 is addressed in Module 3.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 3 Modules
	<p>is limited to problems posed with whole numbers and having whole-number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order, i.e., Order of Operations.)</p> <p>Represent and interpret data.⁶³</p> <p>3.MD.4 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.</p> <p>Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.</p> <p>3.MD.8 Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.</p> <p>Reason with shapes and their attributes.⁶⁴</p> <p>3.G.1 Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.</p>

⁶³ 3.MD.3 is addressed in Module 6.

⁶⁴ 3.G.2 is addressed in Module 5.

Sequence of Grade 4 Modules Aligned with the Standards

Module 1: Place Value, Rounding, and Algorithms for Addition and Subtraction

Module 2: Unit Conversions and Problem Solving with Metric Measurement

Module 3: Multi-Digit Multiplication and Division

Module 4: Angle Measure and Plane Figures

Module 5: Fraction Equivalence, Ordering, and Operations

Module 6: Decimal Fractions

Module 7: Exploring Measurement with Multiplication

Summary of Year

Grade 4 mathematics is about (1) developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends; (2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; and (3) understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.

Key Areas of Focus for 3–5: Multiplication and division of whole numbers and fractions—concepts, skills, and problem solving

Required Fluency: 4.NBT.4 Add and subtract within 1,000,000.

Major Emphasis Clusters
<p>Operations and Algebraic Thinking</p> <ul style="list-style-type: none"> Use the four operations with whole numbers to solve problems.
<p>Number and Operations in Base Ten</p> <ul style="list-style-type: none"> Generalize place value understanding for multi-digit whole numbers. Use place value understanding and properties of operations to perform multi-digit arithmetic.
<p>Number and Operations—Fractions</p> <ul style="list-style-type: none"> Extend understanding of fraction equivalence and ordering. Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. Understand decimal notation for fractions, and compare decimal fractions.

Rationale for Module Sequence in Grade 4

In Grade 4, students extend their work with whole numbers. They begin with large numbers using familiar units (tens and hundreds) and develop their understanding of thousands by building knowledge of the pattern of *times ten* in the base-ten system on the place value chart (**4.NBT.1**). In

Grades 2 and 3, students focused on developing the concept of composing and decomposing place value units within the addition and subtraction algorithms. Now, in Grade 4, those (de)compositions are seen through the lens of multiplicative comparison (e.g., 1 thousand is 10 times as much as 1 hundred). They next apply their broadened understanding of patterns on the place value chart to compare, round, add, and subtract. The addition and subtraction algorithms are then efficient and useful applications of students' knowledge of and skill with composing and decomposing higher value units. The module culminates with solving multi-step word problems involving addition and subtraction modeled with tape diagrams that focus on numerical relationships.

The algorithms continue to play a part in Module 2 as students relate place value units to metric units. This module helps students draw similarities between:

1 ten	= 10 ones
1 hundred	= 10 tens
1 hundred	= 100 ones
1 meter	= 100 centimeters
1 thousand	= 1,000 ones
1 kilometer	= 1,000 meters
1 kilogram	= 1,000 grams
1 liter	= 1,000 milliliters

Students work with metric measurement in the context of the addition and subtraction algorithms, mental math, place value, and word problems. Customary units are used as a context for fractions in Modules 5 and 7.

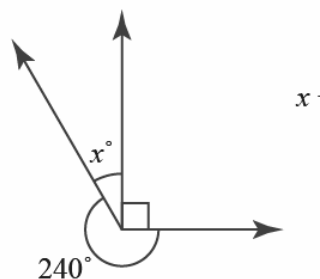
In Module 3, measurement of perimeter and area provide the concrete foundation behind the distributive property in the multiplication algorithm: $4 \times (1 \text{ m } 2 \text{ cm})$ can be modeled concretely using ribbon, since it is easy to see the 4 copies of 1 meter and the 4 copies of 2 centimeters. Likewise, $4 \times (1 \text{ ten } 2 \text{ ones}) = 4 \text{ tens } 8 \text{ ones}$. Students next use place value disks to develop efficient procedures and the algorithms for multiplying and dividing one-digit whole numbers. They understand and explain why the procedures work, and connections are made between the area model and work on the place value chart. Two-digit by two-digit multiplication is then modeled using the area model, extending students' earlier experiences with measurement and the distributive property. Students also solve word problems throughout the module where they select and accurately apply appropriate methods to estimate, mentally calculate, or use written strategies to compute products and quotients.

Module 4 focuses as much on solving unknown angle problems using letters and equations as it does on building, drawing, and analyzing two-dimensional shapes in geometry. Students have already used letters and equations to solve word problems in earlier grades. They continue to do so in Grade 4, and now they also learn to solve unknown angle problems: work that challenges students to build and solve equations to find unknown angle measures. First, students learn the definition of degree and learn how to measure angles in degrees using a circular protractor. From the definition of degree and the fact that angle measures are additive, the following rudimentary facts about angles naturally follow:

1. The sum of angle measurements around a point is 360 degrees.
2. The sum of angle measurements on a line is 180 degrees.

Hence, from 1 and 2, students see that vertical angles are equal. Armed only with these facts, students are able to generate and solve equations as in the following problem:

Find the unknown angle x .



$$xx + 240 + 90 = 360$$

$$xx + 330 = 360$$

$$xx = 30$$

Unknown angle problems help to unlock algebraic concepts for students because such problems are visual. The xx clearly stands for a specific number. If a student wished, he could place a protractor down on that angle and measure it to find x . But doing so destroys the joy of deducing the answer and solving the puzzle on his own.

Module 5 centers on equivalent fractions and operations with fractions. We use fractions when there is a given unit, the *whole unit*, but we want to measure using a smaller unit, called the *fractional unit*. To prepare students to explore the relationship between a fractional unit and its whole unit, examples of such relationships in different contexts were already carefully established earlier in the year:

360 degrees in	1 complete turn
100 centimeters in	1 meter
1000 grams in	1 kilogram
1000 milliliters in	1 liter

The beauty of fractional units, once defined and understood, is that they behave just as all other units do:

- “3 fourths + 5 fourths = 8 fourths” just as “3 meters + 5 meters = 8 meters”
- “ 4×3 fourths = 12 fourths” just as “ 4×3 meters = 12 meters”

Students add and subtract fractions with like units using the area model and the number line. They multiply a fraction by a whole number where the interpretation is as repeated addition (e.g., 3 fourths + 3 fourths = 2×3 fourths). Through this introduction to fraction arithmetic they gradually come to understand fractions as units they can manipulate, just like whole numbers. Throughout the module, customary units of measurement provide a relevant context for the arithmetic.

Module 6, on decimal fractions, starts with the realization that decimal place value units are simply special fractional units: 1 tenth = $1/10$, 1 hundredth = $1/100$, etc. Fluency plays an important role in this topic as students learn to relate $3/10 = 0.3 = 3$ tenths. They also recognize that 3 tenths is equal to 30 hundredths and subsequently have their first experience adding and subtracting fractions with unlike units (e.g., 3 tenths + 4 hundredths = 30 hundredths + 4 hundredths).

The year ends with a module focused on multiplication and measurement, as they solve multi-step word problems. Exploratory lessons support conceptual understanding of the relative sizes of measurement units. Students explore conversion in hands-on settings and subsequently apply those conversions to solve multi-step word problems involving all operations and multiplicative comparison.

Alignment Chart⁶⁵

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 4 Modules
Module 1: Place Value, Rounding, and Algorithms for Addition and Subtraction (25 days)	Use the four operations with whole numbers to solve problems.⁶⁶ 4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

⁶⁵ When a cluster is referred to in this chart without a footnote, the cluster is addressed in its entirety.

⁶⁶ The balance of this cluster is addressed in Modules 3 and 7.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 4 Modules
	<p>Generalize place value understanding for multi-digit whole numbers. (Grade 4 expectations in this domain are limited to whole numbers less than or equal to 1,000,000.)</p> <p>4.NBT.1 Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. <i>For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.</i></p> <p>4.NBT.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p> <p>4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.</p> <p>Use place value understanding and properties of operations to perform multi-digit arithmetic.⁶⁷</p> <p>4.NBT.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm.</p>
<p>Module 2: Unit Conversions and Problem Solving with Metric Measurement (7 days)</p>	<p>Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.⁶⁸</p> <p>4.MD.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. <i>For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...</i></p> <p>4.MD.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.</p>

⁶⁷From this point forward, fluency practice is part of students' on-going experience. The balance of this cluster is addressed in Module 3.

⁶⁸The focus of this module is on the metric system to reinforce place value, mixed units, and word problems with unit conversions. Decimal and fraction word problems wait until Modules 6 and 7. 4.MD.3 is addressed in Module 3.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 4 Modules
<p>Module 3: Multi-Digit Multiplication and Division (43 days)</p>	<p>Use the four operations with whole numbers to solve problems.</p> <p>4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.</p> <p>4.OA.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison. (See Standards Glossary, Table 2.)</p> <p>4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.</p> <p>Gain familiarity with factors and multiples.</p> <p>4.OA.4 Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.</p> <p>Use place value understanding and properties of operations to perform multi-digit arithmetic. (Grade 4 expectations in this domain are limited to whole numbers less than or equal to 1,000,000.)⁶⁹</p> <p>4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>4.NBT.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the</p>

⁶⁹4.NBT.4 is addressed in Module 1 and is then reinforced throughout the year.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 4 Modules
	<p>relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.⁷⁰</p> <p>4.MD.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems. <i>For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.</i></p>
<p>Module 4: Angle Measure and Plane Figures (20 days)</p>	<p>Geometric measurement: understand concepts of angle and measure angles.</p> <p>4.MD.5 Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:</p> <ol style="list-style-type: none"> An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $\frac{1}{360}$ of a circle is called a “one-degree angle,” and can be used to measure angles. An angle that turns through n one-degree angles is said to have an angle measure of n degrees. <p>4.MD.6 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.</p> <p>4.MD.7 Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.</p>

⁷⁰4.MD.1 is addressed in Modules 2 and 7; 4.MD.2 is addressed in Modules 2, 6, and 7.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 4 Modules
	<p>Draw and identify lines and angles, and classify shapes by properties of their lines and angles.</p> <p>4.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.</p> <p>4.G.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.</p> <p>4.G.3 Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.</p>
<p>Module 5: Fraction Equivalence, Ordering, and Operations⁷¹ (45 days)</p>	<p>Generate and analyze patterns.</p> <p>4.OA.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. <i>For example, given the rule “Add 3” and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.</i></p> <p>Extend understanding of fraction equivalence and ordering. (Grade 4 expectations in this domain are limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.)</p> <p>4.NF.1 Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.</p> <p>4.NF.2 Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$. Recognize that comparisons are valid only when the two fractions refer to the same whole.</p>

⁷¹Tenths and hundredths are important fractions in this module, represented in decimal form in Module 6.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 4 Modules
	<p>Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.</p> <p>Build fractions from unit fractions by applying and extending previous understanding of operations on whole numbers.</p> <p>4.NF.3 Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$.</p> <ol style="list-style-type: none"> Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. <i>Examples:</i> $3/8 = 1/8 + 1/8 + 1/8$; $3/8 = 1/8 + 2/8$; $2\ 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8$. Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem. <p>4.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.</p> <ol style="list-style-type: none"> Understand a fraction a/b as a multiple of $1/b$. <i>For example, use a visual fraction model to represent $5/4$ as the product $5 \times (1/4)$, recording the conclusion by the equation $5/4 = 5 \times (1/4)$.</i> Understand a multiple of a/b as a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number. <i>For example, use a visual fraction model to express $3 \times (2/5)$ as $6 \times (1/5)$, recognizing this product as $6/5$. (In general, $n \times (a/b) = (n \times a)/b$.)</i>

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 4 Modules
	<p>c. Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. <i>For example, if each person at a party will eat $\frac{3}{8}$ of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?</i></p> <p>Represent and interpret data.</p> <p>4.MD.4 Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots. <i>For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.</i></p>
<p>Module 6: Decimal Fractions (20 days)</p>	<p>Understand decimal notation for fractions, and compare decimal fractions. (Grade 4 expectations in this domain are limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.)⁷²</p> <p>4.NF.5 Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. (Students who can generate equivalent fractions can develop strategies for adding fractions with unlike denominators in general. But addition and subtraction with unlike denominators in general is not a requirement at this grade.) <i>For example, express $\frac{3}{10}$ as $\frac{30}{100}$, and add $\frac{3}{10} + \frac{4}{100} = \frac{34}{100}$.</i></p> <p>4.NF.6 Use decimal notation for fractions with denominators 10 or 100. <i>For example, rewrite 0.62 as $\frac{62}{100}$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.</i></p> <p>4.NF.7 Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model.</p>

⁷² In this module, we continue to work with fractions, now including decimal form.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 4 Modules
	<p>Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.⁷³</p> <p>4.MD.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.</p>
<p>Module 7: Exploring Measurement with Multiplication (20 days)</p>	<p>Use the four operations with whole numbers to solve problems.</p> <p>4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.</p> <p>4.OA.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison. (See Standards Glossary, Table 2.)</p> <p>4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.</p> <p>Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.⁷⁴</p> <p>4.MD.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a</p>

⁷³ 4.MD.1 is addressed in Modules 2 and 7; 4.MD.3 is addressed in Module 3.

⁷⁴ The focus now is on customary units in word problems for application of fraction concepts. 4.MD.3 is addressed in Module 3.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 4 Modules
	<p>larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. <i>For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...</i></p> <p>4.MD.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.</p>

Sequence of Grade 5 Modules Aligned with the Standards

Module 1: Place Value and Decimal Fractions

Module 2: Multi-Digit Whole Number and Decimal Fraction Operations

Module 3: Addition and Subtraction of Fractions

Module 4: Multiplication and Division of Fractions and Decimal Fractions

Module 5: Addition and Multiplication with Volume and Area

Module 6: Problem Solving with the Coordinate Plane

Summary of Year

Grade 5 mathematics is about (1) developing fluency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions); (2) extending division to two-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations; and (3) developing understanding of volume.

Key Areas of Focus for 3–5: Multiplication and division of whole numbers and fractions—concepts, skills, and problem solving

Required Fluency: 5.NBT.5 Multi-digit multiplication.

Major Emphasis Clusters

Number and Operations in Base Ten

- Understand the place value system.
- Perform operations with multi-digit whole numbers and with decimals to hundredths.

Number and Operations—Fractions

- Use equivalent fractions as a strategy to add and subtract fractions.
- Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

Measurement and Data

- Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

Rationale for Module Sequence in Grade 5

Students' experiences with the algorithms as ways to manipulate place value units in Grades 2–4 really begin to pay dividends in Grade 5. In Module 1, whole number patterns with number disks on the place value chart are easily generalized to decimal numbers. As students work word problems with measurements in the metric system, where the same patterns occur, they begin to appreciate the value and the meaning of decimals. Students apply their work with place value to adding, subtracting, multiplying, and dividing decimal numbers with tenths and hundredths.

Module 2 begins by using place value patterns and the distributive and associative properties to multiply multi-digit numbers by multiples of 10 and leads to fluency with multi-digit whole number multiplication.⁷⁵ For multiplication, students must grapple with and fully understand the distributive property (one of the key reasons for teaching the multi-digit algorithm). While the multi-digit multiplication algorithm is a straightforward generalization of the one-digit multiplication algorithm, the division algorithm with two-digit divisors requires far more care to teach because students have to also learn estimation strategies, error correction strategies, and the idea of successive approximation (all of which are central concepts in math, science, and engineering).

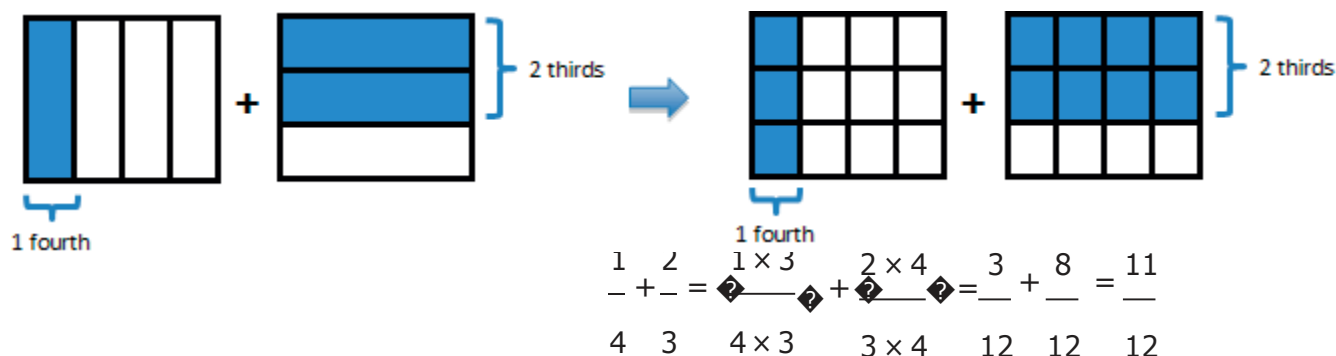
Work with place value units paves the path toward fraction arithmetic in Module 3 as elementary math’s place value emphasis shifts to the larger set of fractional units for algebra. Like units are added to and subtracted from like units:

$$1.5 + 0.8 = 1\frac{5}{10} + \frac{8}{10} = 15 \text{ tenths} + 8 \text{ tenths} = 23 \text{ tenths} = 2 \text{ and } 3 \text{ tenths} = 2\frac{3}{10}$$

$$1\frac{5}{9} + \frac{8}{9} = 14 \text{ ninths} + 8 \text{ ninths} = 22 \text{ ninths} = 2 \text{ and } 4 \text{ ninths} = 2\frac{4}{9}$$

The new complexity is that when units are not equivalent, they must be changed for smaller equal units so that they can be added or subtracted. Probably the best model for showing this is the rectangular fraction model pictured below. The equivalence is then represented symbolically as students engage in active meaning-making rather than obeying the perhaps mysterious command to “multiply the top and bottom by the same number.”

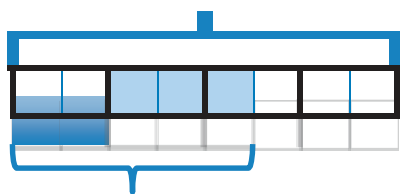
1 boy + 2 girls = 1 child + 2 children = 3 children
 1 fourth + 2 thirds = 3 twelfths + 8 twelfths = 11 twelfths



Relating different fractional units to one another requires extensive work with area and number line diagrams whereas tape diagrams are used often in word problems. Tape diagrams, which students began using in the early grades and which become increasingly useful as students applied them to a greater variety of word problems, hit their full strength as a model when applied to fraction word problems. At the heart of a tape diagram is the now-familiar idea of forming units. In fact, forming units to solve word problems is one of the most powerful examples of the unit theme and is particularly helpful for understanding fraction arithmetic, as in the following example:

Jill had \$32. She gave $\frac{1}{4}$ of her money to charity and $\frac{3}{8}$ of her money to her brother. How much did she give altogether?

\$32



?

Solution with units:

$$8 \text{ units} = \$32$$

$$1 \text{ unit} = \$4$$

Solution with arithmetic:

$$\frac{1}{4} \frac{3}{8} \frac{2}{8} \frac{3}{8} \frac{5}{8}$$

$$\frac{5}{8} \times 32 = 20$$

Jill gave \$20 altogether.

Near the end of Module 4, students know enough about fractions and whole number operations to begin to explore multi-digit decimal multiplication and division. In multiplying 2.1×3.8 , for example, students now have multiple skills and strategies that they can use to locate the decimal point in the final answer, including:

- Unit awareness: $2.1 \times 3.8 = 21 \text{ tenths} \times 38 \text{ tenths} = 798 \text{ hundredths}$
- Estimation (through rounding): $2.1 \times 3.8 \approx 2 \times 4 = 8$, so $2.1 \times 3.8 = 7.98$
- Fraction multiplication: $2 \times \frac{38}{10} = \frac{21}{10} \times \frac{38}{10} = \frac{21}{10} \times 38 \times \frac{1}{10} = \frac{21}{100} \times 38 \times \frac{1}{10} = \frac{798}{100}$

Similar strategies enrich students' understanding of division and help them to see multi-digit decimal division as whole number division in a different unit. For example, we divide to find, "How many groups of 3 apples are there in 45 apples?" and write $45 \text{ apples} \div 3 \text{ apples} = 15$. Similarly, $4.5 \div 0.3$ can be written as $45 \text{ tenths} \div 3 \text{ tenths}$ with the same answer: *There are 15 groups of 0.3 in 4.5.* This idea was used to introduce fraction division earlier in the module, thus gluing division to whole numbers, fractions, and decimals together through an understanding of units.

Frequent use of the area model in Modules 3 and 4 prepares students for an in-depth discussion of area and volume in Module 5. But the module on

area and volume also reinforces work done in the fraction module. Now, questions about how the area changes when a rectangle is scaled by a whole or fractional scale factor may be asked, and missing fractional sides may be found. Measuring volume once again highlights the unit theme, as a unit cube is chosen to represent a volume unit and used to measure the volume of simple shape composed of regular prisms .

A

In this final module of *A Story of Units*, students connect plane geometry with numerical work to investigate relationships. They construct the coordinate plane, plot points and draw lines. For points on a given line, students discover a common relationship between the x and y coordinates, foreshadowing the proportional reasoning of Grade 6, and later, the slope of a line.

Alignment Chart⁷⁶

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 5 Modules
<p>Module 1: Place Value and Decimal Fractions (20 days)</p>	<p>Understand the place value system.</p> <p>5.NBT.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and $1/10$ of what it represents in the place to its left.</p> <p>5.NBT.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.</p> <p>5.NBT.3 Read, write, and compare decimals to thousandths.</p> <p>a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.</p> <p>b. Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p> <p>5.NBT.4 Use place value understanding to round decimals to any place.</p> <p>Perform operations with multi-digit whole numbers and with decimals to hundredths.⁷⁷</p> <p>5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p>

⁷⁶When a cluster is referred to in this chart without a footnote, the cluster is addressed in its entirety.

⁷⁷This standard is addressed again in Modules 2 and 4; the balance of this cluster is addressed in Module 2.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 5 Modules
	<p>Convert like measurement units within a given measurement system.⁷⁸</p> <p>5.MD.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.</p>
<p>Module 2: Multi-Digit Whole Number and Decimal Fraction Operations (35 days)</p>	<p>Write and interpret numerical expressions.⁷⁹</p> <p>5.OA.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.</p> <p>5.OA.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. <i>For example, express the calculation “add 8 and 7, then multiply by 2” as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.</i></p> <p>Understand the place value system.⁸⁰</p> <p>5.NBT.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.</p> <p>5.NBT.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.</p> <p>Perform operations with multi-digit whole numbers and with decimals to hundredths.</p> <p>5.NBT.5 Fluently multiply multi-digit whole numbers using the standard algorithm.⁸¹</p> <p>5.NBT.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using</p>

⁷⁸ The focus of this module is on the metric system to reinforce place value and writing measurements using mixed units.

⁷⁹ These skills are also applied to fractions in this module.

⁸⁰ The balance of this cluster is addressed in Module 1.

⁸¹ From this point forward, fluency practice is part of students' on-going experience.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 5 Modules
	<p>equations, rectangular arrays, and/or area models.</p> <p>5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.⁸²</p> <p>Convert like measurement units within a given measurement system.</p> <p>5.MD.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.</p>
<p>Module 3: Addition and Subtraction of Fractions (22 days)</p>	<p>Use equivalent fractions as a strategy to add and subtract fractions.⁸³</p> <p>5.NF.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. <i>For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. (In general, $a/b + c/d = (ad + bc)/bd$.)</i></p> <p>5.NF.2 Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. <i>For example, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$.</i></p>
<p>Module 4: Multiplication and Division of Fractions and Decimal Fractions (38 days)</p>	<p>Write and interpret numerical expressions.</p> <p>5.OA.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.</p>

⁸² Focus on decimal multiplication of a single-digit, whole number factor times a multi-digit number with up to 2 decimal places (e.g., 3×64.98). Restrict decimal division to a single-digit whole number divisor with a multi-digit dividend with up to 2 decimal places (e.g., $64.98 \div 3$). The balance of the standard is addressed in Module 4.

⁸³ Examples in this module also include tenths and hundredths in fraction and decimal form.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 5 Modules
	<p>5.OA.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. <i>For example, express the calculation “add 8 and 7, then multiply by 2” as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.</i></p> <p>Perform operations with multi-digit whole numbers and with decimals to hundredths.⁸⁴</p> <p>5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p> <p>Apply and extend previous understandings of multiplication and division to multiply and divide fractions.⁸⁵</p> <p>5.NF.3 Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. <i>For example, interpret $3/4$ as the result of dividing 3 by 4, noting that $3/4$ multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size $3/4$. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?</i></p> <p>5.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.</p> <p><i>a. Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. For example, use a visual fraction model to show $(2/3) \times 4 = 8/3$, and create a story context for this equation. Do the same with $(2/3) \times (4/5) = 8/15$. (In general, $(a/b) \times (c/d) = ac/bd$.)</i></p>

⁸⁴ The balance of this cluster is addressed in Module 2. Teach problems such as 2.7×2.1 and $4.5 \div 1.5$. See the Progression Document “K–5, Number and Operations in Base Ten” pp. 17–18 (http://commoncoretools.files.wordpress.com/2011/04/ccss_progression_nbt_2011_04_073.pdf).

⁸⁵ 5.NF.4b is addressed in Module 5. Include problems involving decimal fractions throughout the cluster.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 5 Modules
	<p>5.NF.5 Interpret multiplication as scaling (resizing), by:</p> <ol style="list-style-type: none"> Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying a/b by 1. <p>5.NF.6 Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.</p> <p>5.NF.7 Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. (Students able to multiply fractions in general can develop strategies to divide fractions in general, by reasoning about the relationship between multiplication and division. But division of a fraction by a fraction is not a requirement at this grade.)</p> <ol style="list-style-type: none"> Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. <i>For example, create a story context for $(1/3) \div 4$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(1/3) \div 4 = 1/12$ because $(1/12) \times 4 = 1/3$.</i> Interpret division of a whole number by a unit fraction, and compute such quotients. <i>For example, create a story context for $4 \div (1/5)$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div (1/5) = 20$ because $20 \times (1/5) = 4$.</i> Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. <i>For example, how much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $1/3$-cup servings are in 2 cups of raisins?</i>

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 5 Modules
	<p>Convert like measurement units within a given measurement system.⁸⁶</p> <p>5.MD.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.</p> <p>Represent and interpret data.</p> <p>5.MD.2 Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Use operations on fractions for this grade to solve problems involving information presented in line plots. <i>For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.</i></p>
<p>Module 5: Addition and Multiplication with Volume and Area (25 days)</p>	<p>Apply and extend previous understandings of multiplication and division to multiply and divide fractions.⁸⁷</p> <p>5.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.</p> <p>b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.</p> <p>5.NF.6 Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.</p>

⁸⁶The focus of 5.MD.1 in this module is on the customary system of units as a means of introducing fractions (e.g., 1 inch is $\frac{1}{12}$ foot, 1 foot is $\frac{1}{3}$ yard).

⁸⁷The balance of this cluster is addressed in Module 4. In this module, 5.NF.4b is applied to multiplying to find volume and area. 5.NF.4b includes decimal fraction side lengths of sides of a rectangle (in both fraction and decimal form).

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 5 Modules
	<p>Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.</p> <p>5.MD.3 Recognize volume as an attribute of solid figures and understand concepts of volume measurement.</p> <ol style="list-style-type: none"> A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume. A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units. <p>5.MD.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.</p> <p>5.MD.5 Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.</p> <ol style="list-style-type: none"> Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication. Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems. <p>Classify two-dimensional figures into categories based on their properties.</p> <p>5.G.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. <i>For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.</i></p>

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 5 Modules
	<p>5.G.4 Classify two-dimensional figures in a hierarchy based on properties.</p>
<p>Module 6: Problem Solving with the Coordinate Plane (40 days)</p>	<p>Write and interpret numerical expressions.</p> <p>5.OA.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. <i>For example, express the calculation “add 8 and 7, then multiply by 2” as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.</i></p> <p>Analyze patterns and relationships.</p> <p>5.OA.3 Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. <i>For example, given the rule “Add 3” and the starting number 0, and given the rule “Add 6” and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.</i></p> <p>Graph points on the coordinate plane to solve real-world and mathematical problems.</p> <p>5.G.1 Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).</p> <p>5.G.2 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.</p>



A Story of Ratios: A Curriculum Overview for Grades 6–8

Table of Contents

Introduction.....	75
Curriculum Map.....	76
Grade 6.....	77
Grade 7 includes changes to sequencing for AOD	86
Grade 8.....	98

Introduction

This document provides an overview of the academic year for Grades 6 through 8, beginning with a curriculum map and followed by detailed grade-level descriptions.

The curriculum map is a chart that shows, at a glance, the sequence of modules comprising each grade of the Grades 6 through 8 curricula. The map also indicates the approximate number of instructional days designated for each module of each grade. Details that elaborate on the curriculum map are found in the grade-level descriptions.

Each grade-level description begins with a list of the six to seven modules that comprise the instruction of that grade. That introductory component is followed by three sections: the Summary of Year, the Rationale for Module Sequence, and the alignment chart with the grade-level standards.

The Summary of Year portion of each grade level includes four pieces of information:

- The critical instructional areas for the grade, as described in the Common Core State Standards for Mathematics¹(CCSS-M)
- The Key Areas of Focus² for the grade
- The Required Fluencies for the grade
- The Major Emphasis Clusters³ for the grade

The Rationale for Module Sequence portion of each grade level provides a brief description of the instructional focus of each module for that grade and explains the developmental sequence of the mathematics.

The alignment chart for each grade lists the standards that are addressed in each module of the grade. Note that when a cluster is referred to without a footnote, it is taught in its entirety. There are also times when footnotes are relevant to particular standards within a cluster. All standards for each grade have been carefully included in the module sequence. Some standards are deliberately included in more than one module so that a strong foundation can be built over time.

¹http://www.corestandards.org/wp-content/uploads/Math_Standards1.pdf

²http://www.achievethecore.org/downloads/E0702_Description_of_the_Common_Core_Shifts.pdf

³<http://www.parcconline.org/resources/educator-resources/model-content-frameworks/mathematics-model-content-framework>

	Grade 6	Grade 7	Grade 8	
1st TRIMESTER	M1: Ratios and Unit Rates (35 days)	M1: Ratios & Proportional Relationships (30 days)	M1: Integer Exponents and Scientific Notation (20 days)	
	M2: Arithmetic Operations Including Division of Fractions (25 days)	M2: Rational Numbers (30 days)	M2: The Concept of Congruence (25 days)	
			M3: Similarity (25 days)	
2nd TRIMESTER	M3: Rational Numbers (25 days)	M3: Expressions and Equations (35 days)	M4: Linear Equations (40 days)	
	M4: Expressions and Equations (45 days)	M4: Percent and Proportional Relationships (25 days)	M5: Examples of Functions from Geometry (15 days)	
		M5: Statistics and Probability (25 days)	M6: Linear Functions (20 days)	
3rd TRIMESTER	M5: Area, Surface Area, and Volume Problems (25 days)			
	M6: Statistics (25 days)	M6: Geometry (35 days)	M7: Introduction to Irrational Numbers Using Geometry (35 days)	

Key:					
Number	Geometry	Ratios and Proportions	Expressions and Equations	Statistics and Probability	Functions

*The columns indicating trimesters and quarters are provided to give you a rough guideline. Please use this additional column for your own pacing considerations based on the specific dates of your academic calendar.

Sequence of Grade 6 Modules Aligned with the Standards

Module 1: Ratios and Unit Rates

Module 2: Arithmetic Operations Including Division of Fractions

Module 3: Rational Numbers

Module 4: Expressions and Equations

Module 5: Area, Surface Area, and Volume Problems

Module 6: Statistics

Summary of Year

Grade 6 mathematics is about (1) connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems; (2) completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers; (3) writing, interpreting, and using expressions and equations; and (4) developing understanding of statistical thinking.

Key Areas of Focus for Grade 6: Ratios and proportional reasoning; early expressions and equations

Required Fluency: 6.NS.B.2 Multi-digit division
6.NS.B.3 Multi-digit decimal operations

Rationale for Module Sequence in Grade 6

In Module 1, students build on their prior work in measurement and in multiplication and division as they study the concepts and language of ratios and unit rates. They use proportional reasoning to solve problems. In particular, students solve ratio and rate problems using tape diagrams, tables of equivalent ratios, double number line diagrams, and equations. They plot pairs of values generated from a ratio or rate on the first quadrant of the coordinate plane.

Major Emphasis Clusters

Ratios and Proportional Relationships

- Understand ratio concepts and use ratio reasoning to solve problems.

The Number System

- Apply and extend previous understandings of multiplication and division to divide fractions by fractions.
- Apply and extend previous understandings of numbers to the system of rational numbers.

Expressions and Equations

- Apply and extend previous understandings of arithmetic to algebraic expressions.
- Reason about and solve one-variable equations and inequalities.
- Represent and analyze quantitative relationships between dependent and independent variables.

Students expand their understanding of the number system and build their fluency in arithmetic operations in Module 2. Students learned in Grade 5 to divide whole numbers by unit fractions and unit fractions by whole numbers. Now, they apply and extend their understanding of multiplication and division to divide fractions by fractions. The meaning of this operation is connected to real-world problems as students are asked to create and solve fraction division word problems. Students continue (from Grade 5) to build fluency with adding, subtracting, multiplying, and dividing multi-digit decimal numbers using the standard algorithms.

Major themes of Module 3 are to understand rational numbers as points on the number line and to extend previous understandings of numbers to the system of rational numbers, which now include negative numbers. Students extend coordinate axes to represent points in the plane with negative number coordinates and, as part of doing so, see that negative numbers can represent quantities in real-world contexts. They use the number line to order numbers and to understand the absolute value of a number. They begin to solve real-world and mathematical problems by graphing points in all four quadrants, a concept that continues throughout to be used into high school and beyond.

With their sense of number expanded to include negative numbers, in Module 4 students begin formal study of algebraic expressions and equations. Students learn equivalent expressions by continuously relating algebraic expressions back to arithmetic and the properties of arithmetic (commutative, associative, and distributive). They write, interpret, and use expressions and equations as they reason about and solve one-variable equations and inequalities and analyze quantitative relationships between two variables.

Module 5 is an opportunity to practice the material learned in Module 4 in the context of geometry; students apply their newly acquired capabilities with expressions and equations to solve for unknowns in area, surface area, and volume problems. They find the area of triangles and other two-dimensional figures and use the formulas to find the volumes of right rectangular prisms with fractional edge lengths. Students use negative numbers in coordinates as they draw lines and polygons in the coordinate plane. They also find the lengths of sides of figures, joining points with the same first coordinate or the same second coordinate, and apply these techniques to solve real-world and mathematical problems.

In Module 6, students develop an understanding of statistical variability and apply that understanding as they summarize, describe, and display distributions. In particular, careful attention is given to measures of center and variability.

Alignment Chart⁴

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 6 Modules
<p>Module 1: Ratios and Unit Rates (35 days)</p>	<p>Understand ratio concepts and use ratio reasoning to solve problems.</p> <p>6.RP.A.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. <i>For example, “The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak.” “For every vote candidate A received, candidate C received nearly three votes.”</i></p> <p>6.RP.A.2 Understand the concept of a unit rate a/b associated with a ratio $a:b$ with $b \neq 0$, and use rate language in the context of a ratio relationship. <i>For example, “This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $3/4$ cup of flour for each cup of sugar.” “We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger.”</i>⁵</p> <p>6.RP.A.3 Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.</p> <ol style="list-style-type: none"> Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios. Solve unit rate problems including those involving unit pricing and constant speed. <i>For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?</i> Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent. Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.

⁴When a cluster is referred to in this chart without a footnote, the cluster is taught in its entirety.

⁵Expectations for unit rates in this grade are limited to non-complex fractions.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 6 Modules
<p>Module 2: Arithmetic Operations Including Division of Fractions (25 days)</p>	<p>Apply and extend previous understandings of multiplication and division to divide fractions by fractions.</p> <p>6.NS.A.1 Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. <i>For example, create a story context for $(2/3) \div (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) \div (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$. (In general, $(a/b) \div (c/d) = ad/bc$.) How much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $3/4$-cup servings are in $2/3$ of a cup of yogurt? How wide is a rectangular strip of land with length $3/4$ mi and area $1/2$ square mi?</i></p> <p>Compute fluently with multi-digit numbers and find common factors and multiples.</p> <p>6.NS.B.2 Fluently divide multi-digit numbers using the standard algorithm.⁶</p> <p>6.NS.B.3 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.⁷</p> <p>6.NS.B.4 Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. <i>For example, express $36 + 8$ as $4(9 + 2)$.</i></p>
<p>Module 3: Rational Numbers (25 days)</p>	<p>Apply and extend previous understandings of numbers to the system of rational numbers.</p> <p>6.NS.C.5 Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.</p> <p>6.NS.C.6 Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane</p>

⁶This fluency standard begins in this module and is practiced throughout the remainder of the year.

⁷This fluency standard begins in this module and is practiced throughout the remainder of the year.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 6 Modules
	<p>with negative number coordinates.</p> <ol style="list-style-type: none"> Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., $-(-3) = 3$, and that 0 is its own opposite. Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane. <p>6.NS.C.7 Understand ordering and absolute value of rational numbers.</p> <ol style="list-style-type: none"> Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. <i>For example, interpret $-3 > -7$ as a statement that -3 is located to the right of -7 on a number line oriented from left to right.</i> Write, interpret, and explain statements of order for rational numbers in real-world contexts. <i>For example, write $-3^{\circ}\text{C} > -7^{\circ}\text{C}$ to express the fact that -3°C is warmer than -7°C.</i> Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. <i>For example, for an account balance of -30 dollars, write $-30 = 30$ to describe the size of the debt in dollars.</i> Distinguish comparisons of absolute value from statements about order. <i>For example, recognize that an account balance less than -30 dollars represents a debt greater than 30 dollars.</i> <p>6.NS.C.8 Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.</p>

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 6 Modules
<p>Module 4: Expressions and Equations (45 days)</p>	<p>Apply and extend previous understandings of arithmetic to algebraic expressions.⁸</p> <p>6.EE.A.1 Write and evaluate numerical expressions involving whole-number exponents.</p> <p>6.EE.A.2 Write, read, and evaluate expressions in which letters stand for numbers.</p> <p><i>a</i> Write expressions that record operations with numbers and with letters standing for numbers. <i>For example, express the calculation “Subtract y from 5” as $5 - y$.</i></p> <p><i>b</i> Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. <i>For example, describe the expression $2(8 + 7)$ as a product of two factors; view $(8 + 7)$ as both a single entity and a sum of two terms.</i></p> <p><i>c</i> Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). <i>For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$.</i></p> <p>6.EE.A.3 Apply the properties of operations to generate equivalent expressions. <i>For example, apply the distributive property to the expression $3(2 + x)$ to produce the equivalent expression $6 + 3x$; apply the distributive property to the expression $24x + 18y$ to produce the equivalent expression $6(4x + 3y)$; apply properties of operations to $y + y + y$ to produce the equivalent expression $3y$.</i></p> <p>6.EE.A.4 Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). <i>For example, the expressions $y + y + y$ and $3y$ are equivalent because they name the same number regardless of which number y stands for.</i></p>

⁸6.EE.A.2c is also taught in Module 4 in the context of geometry.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 6 Modules
	<p>Reason about and solve one-variable equations and inequalities.⁹</p> <p>6.EE.B.5 Understand solving an equation or inequality as a process of answering a question: Which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.</p> <p>6.EE.B.6 Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.</p> <p>6.EE.B.7 Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p, q, and x are all nonnegative rational numbers.</p> <p>6.EE.B.8 Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.</p> <p>Represent and analyze quantitative relationships between dependent and independent variables.</p> <p>6.EE.C.9 Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. <i>For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.</i></p>
<p>Module 5: Area, Surface Area, and Volume Problems (25 days)</p>	<p>Solve real-world and mathematical problems involving area, surface area, and volume.</p> <p>6.G.A.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.</p>

⁹Except for 6.EE.B.8, this cluster is also taught in Module 4 in the context of geometry.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 6 Modules
	<p>6.G.A.2 Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = l w h$ and $V = b h$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.</p> <p>6.G.A.3 Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.</p> <p>6.G.A.4 Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.</p>
<p>Module 6: Statistics (25 days)</p>	<p>Develop understanding of statistical variability.</p> <p>6.SP.A.1 Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. <i>For example, “How old am I?” is not a statistical question, but “How old are the students in my school?” is a statistical question because one anticipates variability in students’ ages.</i></p> <p>6.SP.A.2 Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.</p> <p>6.SP.A.3 Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.</p> <p>Summarize and describe distributions.</p> <p>6.SP.B.4 Display numerical data in plots on a number line, including dot plots, histograms, and box plots.</p> <p>6.SP.B.5 Summarize numerical data sets in relation to their context, such as by:</p> <ol style="list-style-type: none"> Reporting the number of observations.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 6 Modules
	<ul style="list-style-type: none">b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.

Sequence of Grade 7 Modules Aligned with the Standards

Module 1: Ratios and Proportional Relationships

Module 2: Rational Numbers

Module 3: Expressions and Equations

Module 4: Percent and Proportional Relationships

Module 5: Statistics and Probability

Module 6: Geometry

Summary of Year

Grade 7 mathematics is about (1) developing understanding of and applying proportional relationships; (2) developing understanding of operations with rational numbers and working with expressions and linear equations; (3) solving problems involving scale drawings and informal geometric constructions, and working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume; and (4) drawing inferences about populations based on samples.

Key Areas of Focus for Grade 7: Ratios and proportional reasoning; arithmetic of rational numbers

Rationale for Module Sequence in Grade 7

In Module 1, students build on their Grade 6 experiences with ratios, unit rates, and fraction division to analyze proportional relationships. They decide whether two quantities are in a proportional relationship, identify constants of proportionality, and represent the relationship by equations. These skills are then applied to real-world problems including scale drawings.

In Module 2 students continue to build on understanding of the number line.. They learn to add, subtract, multiply, and divide rational numbers. Module 2 includes rational numbers as they appear in expressions and equations—work that is continued in Module 3.

Major Emphasis Clusters

Ratios and Proportional Relationships

- Analyze proportional relationships and use them to solve real-world and mathematical problems.

The Number System

- Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

Expressions and Equations

- Use properties of operations to generate equivalent expressions.
- Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

Module 3 consolidates and expands students' previous work with generating equivalent expressions and solving equations. Students solve real-life and mathematical problems using numerical and algebraic expressions and equations. Their work with expressions and equations is applied to finding unknown angles and problems involving area, volume, and surface area.

Module 4 parallels Module 1's coverage of ratio and proportion but this time with a concentration on percent. Problems in this module include simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, and percent error. Additionally, this module includes percent problems about populations, which prepare students for probability models about populations covered in the next module.

In Module 5, students learn to draw inferences about populations based on random samples. Through the study of chance processes, students learn to develop, use, and evaluate probability models.

The year concludes with students drawing and constructing geometrical figures in Module 6. They also revisit unknown angle, area, volume, and surface area problems, which now include problems involving percentages of areas or volumes.

Alignment Chart¹⁰

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 7 Modules
Module 1: Ratios and Proportional Relationships (30 days)	<p>Analyze proportional relationships and use them to solve real-world and mathematical problems.¹¹</p> <p>7.RP.A.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. <i>For example, if a person walks $\frac{1}{2}$ mile in each $\frac{1}{4}$ hour, compute the unit rate as the complex fraction $\frac{1/2}{1/4}$ miles per hour, equivalently 2 miles per hour.</i></p> <p>7.RP.A.2 Recognize and represent proportional relationships between quantities.</p> <p>a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.</p>

¹⁰When a cluster is referred to in this chart without a footnote, the cluster is taught in its entirety.

¹¹Percent and proportional relationships are covered in Module 4.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 7 Modules
	<p>b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.</p> <p>c. Represent proportional relationships by equations. <i>For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as $t = pn$.</i></p> <p>d. Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate.</p> <p>7.RP.A.3 Use proportional relationships to solve multistep ratio and percent problems. <i>Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.</i></p> <p>Solve real-life and mathematical problems using numerical and algebraic expressions and equations.¹²</p> <p>7.EE.B.4¹³ Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.</p> <p>a. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. <i>For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?</i></p> <p>Draw, construct, and describe geometrical figures and describe the relationships between them.¹⁴</p> <p>7.G.A.1 Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.</p>

¹² The balance of this cluster is taught in Modules 2, 3, and 4.

¹³ In this module, the equations are derived from ratio problems. 7.EE.B.4a is returned to in Module 2 and Module 3.

¹⁴ 7.G.A.1 is also covered in Module 4. The balance of this cluster is taught in Module 6.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 7 Modules
<p>Module 2: Rational Numbers (30 days)</p>	<p>Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.</p> <p>7.NS.A.1 Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.</p> <ol style="list-style-type: none"> Describe situations in which opposite quantities combine to make 0. <i>For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.</i> Understand $p + q$ as the number located a distance q from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts. Apply properties of operations as strategies to add and subtract rational numbers. <p>7.NS.A.2 Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.</p> <ol style="list-style-type: none"> Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts. Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$. Interpret quotients of rational numbers by describing real-world contexts. Apply properties of operations as strategies to multiply and divide rational numbers.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 7 Modules
	<p>d. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.</p> <p>7.NS.A.3 Solve real-world and mathematical problems involving the four operations with rational numbers.¹⁵</p> <p>Use properties of operations to generate equivalent expressions.¹⁶</p> <p>7.EE.A.2¹⁷ Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. <i>For example, $a + 0.05a = 1.05a$ means that “increase by 5%” is the same as “multiply by 1.05.”</i></p> <p>Solve real-life and mathematical problems using numerical and algebraic expressions and equations.¹⁸</p> <p>7.EE.B.4¹⁹ Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.</p> <p>a. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. <i>For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?</i></p>
<p>Module 3: Expressions and Equations (35 days)</p>	<p>Use properties of operations to generate equivalent expressions.</p> <p>7.EE.A.1 Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.</p> <p>7.EE.A.2 Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. <i>For example, $a + 0.05a = 1.05a$ means</i></p>

¹⁵ Computations with rational numbers extend the rules for manipulating fractions to complex fractions.

¹⁶ The balance of this cluster is taught in Module 3.

¹⁷ In this module, this standard is applied to expressions with rational numbers in them.

¹⁸ The balance of this cluster is taught in Module 3.

¹⁹In this module the equations include negative rational numbers.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 7 Modules
	<p style="text-align: center;"><i>that “increase by 5%” is the same as “multiply by 1.05.”</i></p> <p>Solve real-life and mathematical problems using numerical and algebraic expressions and equations.</p> <p>7.EE.B.3²⁰ Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. <i>For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.</i></p> <p>7.EE.B.4 Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.</p> <p>a. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. <i>For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?</i></p> <p>b. Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. <i>For example: As a salesperson, you are paid \$50 per week plus \$3 per sale. This week you want your pay to be at least \$100. Write an inequality for the number of sales you need to make, and describe the solutions.</i></p>

²⁰Problems in this module take on any form but percent, which is included in Module 4.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 7 Modules
	<p>Solve real-life and mathematical problems involving angle measure, area, surface area, and volume. ²¹</p> <p>7.G.B.4 Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.</p> <p>7.G.B.5 Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.</p> <p>7.G.B.6 Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.</p>
<p>Module 4: Percent and Proportional Relationships²² (25 days)</p>	<p>Analyze proportional relationships and use them to solve real-world and mathematical problems.</p> <p>7.RP.A.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. <i>For example, if a person walks $\frac{1}{2}$ mile in each $\frac{1}{4}$ hour, compute the unit rate as the complex fraction $\frac{1/2}{1/4}$ miles per hour, equivalently 2 miles per hour.</i></p> <p>7.RP.A.2 Recognize and represent proportional relationships between quantities.</p> <ol style="list-style-type: none"> Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. Represent proportional relationships by equations. <i>For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as $t = pn$.</i>

²¹ Emphasis of 7.G.B.5 and 7.G.B.6 in this module is on solving equations. The standards are returned to in Module 6.

²² The emphasis in this module is on percent.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 7 Modules
	<p>d. Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate.</p> <p>7.RP.A.3 Use proportional relationships to solve multistep ratio and percent problems. <i>Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.</i></p> <p>Solve real-life and mathematical problems using numerical and algebraic expressions and equations.²³</p> <p>7.EE.B.3 Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. <i>For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.</i></p> <p>Draw, construct, and describe geometrical figures and describe the relationships between them.²⁴</p> <p>7.G.A.1 Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.</p>
<p>Module 5: Statistics and Probability (25 days)</p>	<p>Use random sampling to draw inferences about a population.</p> <p>7.SP.A.1 Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.</p>

²³ 7.EE.B.3 is introduced in Module 3. The balance of this cluster was taught in the first three modules.

²⁴ 7.G.A.1 is introduced in Module 1. The balance of this cluster is taught in Module 6.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 7 Modules
	<p>7.SP.A.2 Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. <i>For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.</i></p> <p>Draw informal comparative inferences about two populations.</p> <p>7.SP.B.3 Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. <i>For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.</i></p> <p>7.SP.B.4 Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. <i>For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.</i></p> <p>Investigate chance processes and develop, use, and evaluate probability models.</p> <p>7.SP.C.5 Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around $\frac{1}{2}$ indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.</p> <p>7.SP.C.6 Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. <i>For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.</i></p> <p>7.SP.C.7 Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.</p>

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 7 Modules
	<p>a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. <i>For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.</i></p> <p>b. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. <i>For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?</i></p> <p>7.SP.C.8 Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.</p> <p>a. Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs.</p> <p>b. Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., “rolling double sixes”), identify the outcomes in the sample space which compose the event.</p> <p>c. Design and use a simulation to generate frequencies for compound events. <i>For example, use random digits as a simulation tool to approximate the answer to the question: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood?</i></p>
<p>Module 6: Geometry (35 days)</p>	<p>Draw, construct, and describe geometrical figures and describe the relationships between them.²⁵</p> <p>7.G.A.2 Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.</p>

²⁵The balance of this cluster is taught in Modules 1 and 4.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 7 Modules
	<p>7.G.A.3 Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.</p> <p>Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.²⁶</p> <p>7.G.B.5 Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.</p> <p>7.G.B.6 Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.</p>

²⁶ 7.G.B.4 is taught in Module 3; 7.G.B.5 and 7.G.B.6 are introduced in Module 3.

Sequence of Grade 8 Modules Aligned with the Standards

Module 1: Integer Exponents and Scientific Notation

Module 2: The Concept of Congruence

Module 3: Similarity

Module 4: Linear Equations

Module 5: Examples of Functions from Geometry

Module 6: Linear Functions

Module 7: Introduction to Irrational Numbers Using Geometry

Summary of Year

Grade 8 mathematics is about (1) formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations; (2) grasping the concept of a function and using functions to describe quantitative relationships; (3) analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean theorem.

Key Area of Focus for Grade 8: Linear algebra

Rationale for Module Sequence in Grade 8

This year begins with students extending the properties of exponents to integer exponents in Module 1. They use the number line model to support their understanding of the rational numbers and the number system. The number system is revisited at the end of the year (in Module 7) to develop the *real* number line through a detailed study of irrational numbers.

Major Emphasis Clusters

Expressions and Equations

- Work with radicals and integer exponents.
- Understand the connections between proportional relationships, lines, and linear equations.
- Analyze and solve linear equations and pairs of simultaneous linear equations.

Functions

- Define, evaluate, and compare functions.

Geometry

- Understand congruence and similarity using physical models, transparencies, or geometry software.
- Understand and apply the Pythagorean theorem.

In Module 2, students study congruence by experimenting with rotations, reflections, and translations of geometrical figures. Their study of congruence culminates with an introduction to the Pythagorean theorem in which the teacher guides students through the “square-within-a-square” proof of the theorem. Students practice the theorem in real-world applications and mathematical problems throughout the year. (In Module 7, students learn to prove the Pythagorean theorem on their own and are assessed on that knowledge in that module.)

The experimental study of rotations, reflections, and translations in Module 2 prepares students for the more complex work of understanding the effects of dilations on geometrical figures in their study of similarity in Module 3. They use similar triangles to solve unknown angle, side length and area problems. Module 3 concludes with revisiting a proof of the Pythagorean theorem from the perspective of similar triangles.

In Module 4, students use similar triangles learned in Module 3 to explain why the slope of a line is well-defined. Students learn the connection between proportional relationships, lines, and linear equations as they develop ways to represent a line by different equations (e.g., $y = mx + b$, $y - y_1 = m(x - x_1)$). They analyze and solve linear equations and pairs of simultaneous linear equations. The equation of a line provides a natural transition into the idea of a function explored in the next two modules.

Students are introduced to functions in the context of linear equations and area/volume formulas in Module 5. They define, evaluate, and compare functions using equations of lines as a source of linear functions and area and volume formulas as a source of non-linear functions.

In Module 6, students return to linear functions in the context of statistics and probability as bivariate data provides support in the use of linear functions.

By Module 7, students have been using the Pythagorean theorem for several months. They are sufficiently prepared to learn and explain a proof of the theorem on their own. The Pythagorean theorem is also used to motivate a discussion of irrational square roots (irrational cube roots are introduced via volume of a sphere). Thus, as the year began with looking at the number system, so it concludes with students understanding irrational numbers and ways to represent them (radicals, non-repeating decimal expansions) on the real number line.

Alignment Chart²⁷

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 8 Modules
Module 1: Integer Exponents and Scientific Notation (20 days)	Work with radicals and integer exponents.²⁸ <p>8.EE.A.1 Know and apply the properties of integer exponents to generate equivalent numerical expressions. <i>For example, $3^2 \times 3^{-5} = 3^{-3} = 1/3^3 = 1/27$.</i></p> <p>8.EE.A.3 Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. <i>For example, estimate the population of the United States as 3×10^8 and the population of the world as 7×10^9, and determine that the world population is more than 20 times larger.</i></p> <p>8.EE.A.4 Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology.</p>
Module 2: The Concept of Congruence (25 days)	Understand congruence and similarity using physical models, transparencies, or geometry software.²⁹ <p>8.G.A.1 Verify experimentally the properties of rotations, reflections, and translations:</p> <ol style="list-style-type: none"> Lines are taken to lines, and line segments to line segments of the same length. Angles are taken to angles of the same measure. Parallel lines are taken to parallel lines. <p>8.G.A.2 Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.</p>

²⁷ When a cluster is referred to in this chart without a footnote, the cluster is taught in its entirety.

²⁸ 8.EE.A.2 is covered in Module 7.

²⁹ 8.G.A.3, 8.G.A.4, and the balance of 8.G.A.5 are taught in Module 3.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 8 Modules
	<p>8.G.A.5³⁰ Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. <i>For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.</i></p> <p>Understand and apply the Pythagorean Theorem.³¹</p> <p>8.G.B.6³² Explain a proof of the Pythagorean Theorem and its converse.</p> <p>8.G.B.7³³ Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.</p>
<p>Module 3: Similarity (25 days)</p>	<p>Understand congruence and similarity using physical models, transparencies, or geometry software.³⁴</p> <p>8.G.A.3 Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.</p> <p>8.G.A.4 Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.</p> <p>8.G.A.5 Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. <i>For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.</i></p>

³⁰ Congruence is addressed in this module. The balance of this standard (similarity) is taught in Module 3.

³¹ 8.G.B.6 and 8.G.B.7 are also taught in Module 3. The balance of 8.G.B.6 and 8.G.B.7 are covered in Module 7, along with standard 8.G.B.8.

³² The Pythagorean theorem is proved in this module guided by the teacher (square within a square proof). Students are not responsible for explaining a proof until Module 7.

³³ This standard is started in this module and practiced during the year. No solutions that involve irrational numbers are introduced until Module 7.

³⁴The balance of this cluster is taught in Module 1.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 8 Modules
	<p>Understand and apply the Pythagorean Theorem.³⁵</p> <p>8.G.B.6³⁶ Explain a proof of the Pythagorean Theorem and its converse.</p> <p>8.G.B.7³⁷ Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.</p>
<p>Module 4: Linear Equations (40 days)</p>	<p>Understand the connections between proportional relationships, lines, and linear equations.</p> <p>8.EE.B.5 Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. <i>For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.</i></p> <p>8.EE.B.6 Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b.</p> <p>Analyze and solve linear equations and pairs of simultaneous linear equations.</p> <p>8.EE.C.7 Solve linear equations in one variable.</p> <ol style="list-style-type: none"> Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers). Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.

³⁵ 8.G.B.6 and 8.G.B.7 are also taught in Module 2. The balance of standards 8.G.B.6 and 8.G.B.7 are covered in Module 7, along with standard 8.G.B.8.

³⁶ The Pythagorean theorem is proved in this module with guidance by the teacher (proof using similar triangles). Students are not responsible for explaining a proof until Module 7.

³⁷ This standard is started in this module and practiced during the year. No solutions that involve irrational numbers are introduced until Module 7.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 8 Modules
	<p>8.EE.C.8 Analyze and solve pairs of simultaneous linear equations.</p> <ol style="list-style-type: none"> Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously. Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. <i>For example, $3x + 2y = 5$ and $3x + 2y = 6$ have no solution because $3x + 2y$ cannot simultaneously be 5 and 6.</i> Solve real-world and mathematical problems leading to two linear equations in two variables. <i>For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.</i>
<p>Module 5: Examples of Functions from Geometry (15 days)</p>	<p>Define, evaluate, and compare functions.³⁸</p> <p>8.F.A.1 Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.³⁹</p> <p>8.F.A.2 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). <i>For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.</i></p> <p>8.F.A.3 Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. <i>For example, the function $A = s^2$ giving the area of a square as a function of its side length is not linear because its graph contains the points (1,1), (2,4) and (3,9), which are not on a straight line.</i></p>

³⁸ Linear and non-linear functions are compared in this module using linear equations and area/volume formulas as examples.

³⁹ Function notation is not required in Grade 8.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 8 Modules
	<p>Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.</p> <p>8.G.C.9⁴⁰ Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.</p>
<p>Module 6: Linear Functions (20 days)</p>	<p>Use functions to model relationships between quantities.</p> <p>8.F.B.4 Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.</p> <p>8.F.B.5 Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.</p> <p>Investigate patterns of association in bivariate data.⁴¹</p> <p>8.SP.A.1 Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.</p> <p>8.SP.A.2 Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.</p> <p>8.SP.A.3 Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. <i>For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.</i></p>

⁴⁰Solutions that introduce irrational numbers are not introduced until Module 7.

⁴¹8.SP standards are used as applications to the work done with 8.F standards.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 8 Modules
	<p>8.SP.A.4 Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. <i>For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?</i></p>
<p>Module 7: Introduction to Irrational Numbers Using Geometry (35 days)</p>	<p>Know that there are numbers that are not rational, and approximate them by rational numbers.</p> <p>8.NS.A.1 Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number.</p> <p>8.NS.A.2 Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π^2). <i>For example, by truncating the decimal expansion of $\sqrt{2}$, show that $\sqrt{2}$ is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.</i></p> <p>Work with radicals and integer exponents.⁴²</p> <p>8.EE.A.2 Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational.</p> <p>Understand and apply the Pythagorean Theorem.</p> <p>8.G.B.6 Explain a proof of the Pythagorean Theorem and its converse.</p> <p>8.G.B.7 Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.</p> <p>8.G.B.8 Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.</p>

⁴²The balance of this cluster is taught in Module 1.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 8 Modules
	<p>Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.</p> <p>8.G.C.9 Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.⁴³</p>

⁴³ Solutions that introduce irrational numbers are allowed in this module.

Eureka Math is available to the public free of charge, and is available [here](#). All units from K – 8 are the open source material formerly known as Engage NY. Academy of Dover classrooms have the full complement of manipulatives to accompany each unit.

Appendix 2 - Curriculum Documents :: Mathematics

Academy of Dover Math Curriculum Overview 2020

Table of Contents:

AOD Mathematics Overview	2
AOD RTI/MTSS Process	3 - 4
AOD Mathematics Scope & Sequence, K – 5	5 - 60
AOD Mathematics Scope & Sequence, 6 – 8	61 - 107
2nd Grade Unit: Module 1	108
4th Grade Unit: Module 5	108
8th Grade Unit: Module 4	108

Mathematics at Academy of Dover

At Academy of Dover, we have worked diligently to improve our mathematics instruction. In 2020, we adopted Eureka Math as our primary curricular resource for mathematics. The introduction of this high quality instructional material has had a direct impact on our students. AOD uses Eureka as designed by the publisher.

Our focus on creating hands-on learning experiences for children is centered around manipulating the concrete world around them and encourages students to develop strong numeracy skills that prepare them for high school. Mathematics at Academy of Dover is not a simple rote memorization of facts; it is an exploration into the mathematics that provide the foundation for scientific exploration.

We have designed our schedule to enable our Professional Learning Communities to flourish. Teachers meet weekly to analyze data. Teachers devote their time to best practices for use within the Eureka materials, incorporating manipulatives into their daily lessons, and focus on ways to differentiate and meet the needs of all of their learners. Teachers spend time in these PLCs workshopping to share innovative strategies, analyze data from Eureka exit tickets, and collaborate using a cycle of inquiry. The PLCs are facilitated by the Head of School and the Assistant Head of School. Also, teachers use the assessments in Eureka during whole and small group to provide additional data for forming RTI groups and addressing the needs of Tier 1- Tier 3 students.)

Additionally, Academy of Dover has Professional Development days. Whenever possible, teachers are encouraged to meet with their PLC team to further their data analysis and further their work in mathematics instruction. In order to address the weakness of the yellow rating in Gateway 3 the administration is ensuring professional development with grades 6 – 8 to provide acquisition and enhancement of the curriculum.

Academy of Dover's Mathematics RTI process

At Academy of Dover, we are transitioning from RTI to a more encompassing MTSS system and will closely follow any new regulations. Our current process is as follows:

1. Benchmark all students at the beginning of the school year per DE regulations. In school year 2021-2022 we are using Edmentum to regularly assess student progress. Benchmarks are given four times per year with scores communicated to both classroom teachers and parents. All students in all tiers, receive RTI time in the classroom 30 minutes a day.
2. Students performing below expectations are provided interventions in a Tier 2 setting based on the specific needs of the student. Interventions introduce students to the computerized and adaptive programs on Edmentum in a small group setting with heavy teacher support. Teachers incorporate intensive assistance on missing standards using manipulatives and Eureka Math material into these small group settings. Tier 2 interventions are primarily provided by the classroom teacher. Students receive the intervention a minimum of two times per week, with each child's schedule based on a combination of their math and reading needs.
3. Students who do not improve with Tier 2 interventions and who perform in the lowest 10% (nationally) or those who are not making any progress toward grade level expectations after multiple strategies have been attempted in the Tier 2 setting are provided more intense interventions via Tier 3 interventions. Special focus is given to hands-on learning activities, student discussion, and the development of numeracy at the developmental level. Students in 6 – 8 grades meet in a small group with their grade level math teacher.
4. Academy of Dover holds Student Support Team (SST) meetings per DE regulations to discuss strategies for working with the students. Meetings are facilitated by the Head of School and Assistant Head of School and always include the classroom teacher and a special educator. Parent communication is facilitated by the classroom teacher. Each meeting focuses on the needs of that child and analyzes the intervention strategies. New strategies are incorporated into that child's plan when and if needed.
5. Progress Monitoring: Teachers monitor the progress of the student in a variety of ways. First, is the child on trajectory to meet end of grade level expectations? This is the beginning question of each meeting. To analyze that question, teachers look at classroom work and benchmarks. Next, the team looks at the intervention provided, and ask if it is working for that child. Edmentum reports include growth, standard mastery, and time on task. Within the program, changes can be made to direct the student to focus on those standards that best align with the need of the child. The teacher also monitors the progress of the small group interaction.

6. Second Level Screening: For those students who require additional information in order to determine the best intervention, the math specialist uses the ongoing Edmentum reporting in grades 1 – 8. For kindergarten, the Edmentum reporting is used. Teachers monitor and map progress in all grades from their small groups during RTI.



A Story of Units:

A Curriculum Overview for Grades KN–5

Table of Contents:

Introduction.....	6
Curriculum Map.....	7
Kindergarten.....	9
Grade 1.....	18
Grade 2.....	26
Grade 3.....	36
Grade 4.....	48
Grade 5.....	60

Introduction

This document provides an overview of the academic year for Kindergarten through Grade 5, beginning with a curriculum map and followed by detailed grade-level descriptions.

The curriculum map is a chart that shows, at a glance, the sequence of modules comprising each grade of the entire elementary curriculum. The map also indicates the approximate number of instructional days designated for each module of each grade. Details that elaborate on the curriculum map are found in the grade-level descriptions. Each grade-level description begins with a list of the five to eight modules that comprise the instruction of that grade. That introductory component is followed by three sections: the **Summary of Year**, the **Rationale for Module Sequence**, and the **Alignment Chart** with the grade-level standards. The **Summary of Year** portion of each grade level includes four pieces of information:

- The critical instructional areas for the grade, as described in the Common Core State Standards for Mathematics¹(CCSS-M)
- The Key Areas of Focus² for the grade band (Note that this information is not available for Pre-Kindergarten.)
- The Required Fluencies for the grade (Note that this information is not available for Pre-Kindergarten.)
- The Major Emphasis Clusters for the grade (Note that this information is not available for Pre-Kindergarten.)

The **Rationale for Module Sequence** portion of each grade level provides a brief description of the instructional focus of each module for that grade and explains the developmental sequence of the mathematics.

The **Alignment Chart** for each grade lists the standards that are addressed in each module of the grade. Throughout the alignment charts, when a cluster is included without a footnote, it is taught in its entirety; there are also times when footnotes are relevant to particular standards within a cluster. All standards for each grade have been carefully included in the module sequence. Some standards are deliberately included in more than one module so that a strong foundation can be built over time.

¹http://www.corestandards.org/wp-content/uploads/Math_Standards1.pdf

²<http://www.corestandards.org/other-resources/key-shifts-in-mathematics/>

	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
1st TRIMESTER	M1: Numbers to 10 (43 days)	M1: Sums and Differences to 10 (45 days)	M1: Sums and Differences to 100 (10 days)	M1: Properties of Multiplication and Division and Solving Problems with Units of 2-5 and 10 (25 days)	M1: Place Value, Rounding, and Algorithms for Addition and Subtraction (25 days)	M1: Place Value and Decimal Fractions (20 days)
			M2: Addition and Subtraction of Length Units (12 days)			
	**M2: 2D and 3D Shapes (12 days)	M2: Introduction to Place Value Through Addition and Subtraction Within 20 (35 days)	M3: Place Value, Counting, and Comparison of Numbers to 1,000 (25 days)	M2: Place Value and Problem Solving with Units of Measure (25 days)	**M2: Unit Conversions (7 days)	M2: Multi-Digit Whole Number and Decimal Fraction Operations (35 days)
2nd TRIMESTER	M3: Comparison of Length, Weight, Capacity, and Numbers to 10 (38 days)	M3: Ordering and Comparing Length Measurements as Numbers (15 days)	M4: Addition and Subtraction Within 200 with Word Problems to 100 (35 days)	M3: Multiplication and Division with Units of 0, 1, 6-9, and Multiples of 10 (25 days)	M3: Multi-Digit Multiplication and Division (43 days)	M3: Addition and Subtraction of Fractions (22 days)
	M4: Number Pairs, Addition and Subtraction to 10 (47 days)	M4: Place Value, Comparison, Addition and Subtraction to 40 (35 days)	M5: Addition and Subtraction Within 1,000 with Word Problems to 100 (24 days)	M4: Multiplication and Area (20 days)		M4: Angle Measure and Plane Figures (20 days)
3rd TRIMESTER	M5: Numbers 10-20 and Counting to 100 (30 days)	M5: Identifying, Composing, and Partitioning Shapes (15 days)	M6: Foundations of Multiplication and Division (24 days)	M5: Fractions as Numbers on the Number Line (35 days)	M5: Fraction Equivalence, Ordering, and Operations (45 days)	M5: Addition and Multiplication with Volume and Area (25 days)
		M6: Place Value, Comparison, Addition and Subtraction to 100 (35 days)	M7: Problem Solving with Length, Money, and Data (30 days)	M6: Collecting and Displaying Data (10 days)		M6: Decimal Fractions (20 days)
	M6: Analyzing, Comparing and Composing Shapes	M6: Analyzing, Comparing and Composing Shapes	M8: Time, Shapes, and Fractions as Equal Parts of Shapes (20 days)	M7: Geometry and Measurement Word Problems (40 days)	M7: Exploring Measurement with Multiplication (20 days)	M6: Problem Solving with the Coordinate Plane (40 days) – spiraled through other units, not completed as stand alone

Key:			
Number	Geometry	Number and Geometry, Measurement	Fractions

Sequence of Kindergarten Modules Aligned with the Standards

Module 1: Numbers to 10

Module 2: Two-Dimensional and Three-Dimensional Shapes

Module 3: Comparison of Length, Weight, Capacity, and Numbers to 10

Module 4: Number Pairs, Addition and Subtraction to 10

Module 5: Numbers 10–20 and Counting to 100

Module 6: Analyzing, Comparing, and Composing Shapes

Summary of Year

Kindergarten mathematics is about (1) representing, relating, and operating on whole numbers, initially with sets of objects; and (2) describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics.

Key Areas of Focus for K–2: Addition and subtraction—concepts, skills, and problem solving

Required Fluency: K.OA.5 Add and subtract within 5.

Major Emphasis Clusters

Counting and Cardinality

- Know number names and count sequence.
- Count to tell the number of objects.
- Compare numbers.

Operations and Algebraic Thinking

- Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

Number and Operations in Base Ten

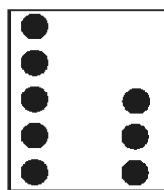
- Work with numbers 11–19 to gain foundations for place value.

Rationale for Module Sequence in Kindergarten

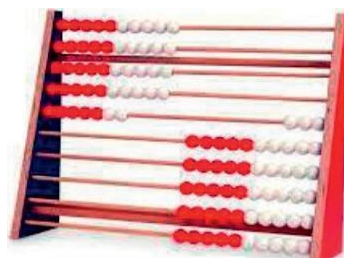
A Story of Units continues in Kindergarten. Just like in Pre-K, ladybugs, fingers, and plastic bears are manipulated and counted in Kindergarten, with work consistently moving to the pictorial and abstract levels. The new, foundational unit introduced in Kindergarten’s Module 5, is the supremely important unit of *one*. By the end of the Kindergarten year, students’ first steps into place value are evidenced as they make precise statements such as, “12 is the same as 10 ones and 2 ones!” Notice how this sets the foundation for later work with decimal units (e.g., in Grade 1, “12 is the same as 1 ten and 2 ones;” in Grade 2, “12 tens is the same as 10 tens and 2 tens or 1 hundred 2 tens;” and in Grade 4, “12 tenths is the same as 10 tenths and 2 tenths or 1 one and 2 tenths”).

To begin the year, Kindergarten students start out classifying and categorizing objects, leading to making one group (e.g., “I made a group of 9 goldfish. Look how I can count them in a line, in rows, and in a circle”). Students learn the way each number from 0 to 10 relates to five using fingers,

cubes, drawings, 5-groups (pictured below) and the Rekenrek, an abacus with a color change after the fifth bead (pictured below). The materials support students in seeing all numbers to ten in relationship to five, as they also see them on their fingers, the best manipulative of all! This renders 6, 7, 8, 9, and 10 more friendly as they see, for example, the 3 and 5 embedded within 8. Notice how the distribution of 8 beads as 5 beads and 3 beads sets the stage for the distributive property in Grade 3 (“8 fours = 5 fours + 3 fours, so $(5 \times 4) + (3 \times 4) = 20 + 12 = 32$ ”). Students close the module by investigating patterns of *1 more* and *1 less* (excluding the word *than*) using models such as the number stairs (pictured below right) with a color change after the fifth cube.



5-Group Card



Rekenrek



Number Stairs

In Module 2, students take a needed break from numbers to analyze their environment and describe and identify squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres. During both Modules 2 and 3, students also practice their fluency by counting and manipulating numbers to 10 during their fluency practice, giving them ample time to prepare for the addition and subtraction of Module 4.

In Module 3, students directly compare two quantities, first learning to identify the attribute being compared. The use of the word *than* is carefully developed first in the context of length (e.g., *taller than*, *shorter than*), then weight (*heavier than*, *lighter than*), and finally capacity. Notice how *more than* and *less than* are used to compare capacities (e.g., “The bucket holds *more than* the cup”). This transitions students smoothly into comparing numbers (e.g., “9 chairs is *more than* 6 chairs”). This concrete foundation for comparison is essential to students’ entire K–12 experience. Ask any Grade 5 teacher which of the two following word problems is more challenging for students:

- There are 34.6 kilograms of sand and 3 kilograms more gravel than sand. What is the total weight of the gravel and sand?
- There are 34.6 kilograms of sand and 3 times as much gravel. What is the total weight of the gravel and the sand?

Problem (a) is more challenging because of the language of *more than*. Students consistently struggle to reason about the relationship of quantities, often resorting to using ineffective tricks (e.g., “If the problem says *more than*, subtract,” which is not correct in the sand and gravel problem). Module 3 in Kindergarten is intended to provide a solid foundation to future comparison work in the meaningful context of measurement.

In Module 4, comparison flows into addition and subtraction, as it does in all the elementary grades (e.g., “7 is more than 3” leads to, “ $7 = 3 + 4$,” and “ $3 + 4 = 7$ ”). Students represent *add to*, *take away*, and *put together* stories with blocks, drawings, and equations. Toward the end of the module,

students start to reorient from 5 toward 10 ones with “How much more does 7 need to make ten?” These final lessons set the stage for Module 5 wherein 10 ones is the structure on which students build the teen numbers. They are also critical foundation standards for Grade 1. Students must know how much a number needs to make ten in order to use the *make ten* strategy in Grades 1 and 2, shown to be an important route to place value understanding as they master their sums and differences to 20 by the end of Grade 2.

In Module 5, after an extended experience of addition and subtraction with totals up to 10, students progress to investigating numbers 10–20. For example, thirteen beans are decomposed as 10 beans and 3 beans just as 8 beans are decomposed as 5 beans and 3 beans. Students record their decompositions of the teen numbers as equations, $13 = 10 + 3$, and start to think, “10. 3 more is 13.” As mentioned at the beginning of the story in Grade 1, the unit *one* is introduced as students learn to think of the teen numbers as 10 ones and some ones. For the first time, *one* is not an object but rather a noun! Notice how this sets the stage for expanded form in the upper grades (e.g., $36 = 30 + 6$, or $13.6 = 10 + 3 + 0.6$).

Module 6 rounds out the year with an exploration of shapes. Students build shapes from components, analyze and compare them, and discover that they can be composed of smaller shapes, just as larger numbers are composed of smaller numbers.

Alignment Chart⁹

Module and Approximate Number of Instructional Days	Standards Addressed in Kindergarten Modules
Module 1: Numbers to 10 ¹⁰ (43 days)	Know number names and the count sequence. ¹¹ K.CC.3 Write numbers from 0 to 20. Represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects). Count to tell the number of objects. ¹² K.CC.4 Understand the relationship between numbers and quantities; connect counting to cardinality. a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

⁹When a cluster is referred to in this chart without a footnote, the cluster is addressed in its entirety.

¹⁰In this module, standards work is limited to within 10.

¹¹The balance of this cluster is addressed in Module 5.

¹²K.CC.4d is addressed in Module 6.

Module and Approximate Number of Instructional Days	Standards Addressed in Kindergarten Modules
	<p>b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.</p> <p>c. Understand that each successive number name refers to a quantity that is one larger.</p> <p>K.CC.5 Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.</p> <p>Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.¹³</p> <p>K.OA.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).</p> <p>Classify objects and count the number of objects in each category.</p> <p>K.MD.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (Limit category counts to be less than or equal to 10.)</p>
<p>Module 2: Two-Dimensional and Three-Dimensional Shapes (12 days)</p>	<p>Classify objects and count the number of objects in each category.</p> <p>K.MD.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (Limit category counts to be less than or equal to 10.)</p> <p>Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).</p> <p>K.G.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as <i>above</i>, <i>below</i>, <i>beside</i>, <i>in front of</i>, <i>behind</i>, and <i>next to</i>.</p> <p>K.G.2 Correctly name shapes regardless of their orientations or overall size.</p>

¹³The balance of this cluster is addressed in Module 4.

Module and Approximate Number of Instructional Days	Standards Addressed in Kindergarten Modules
	<p>KG.3 Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).</p> <p>Analyze, compare, create, and compose shapes.¹⁴</p> <p>KG.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”) and other attributes (e.g., having sides of equal length).</p>
<p>Module 3: Comparison of Length, Weight, Capacity, and Numbers to 10 (38 days)</p>	<p>Compare numbers.</p> <p>K.CC.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. (Include groups with up to ten objects.)</p> <p>K.CC.7 Compare two numbers between 1 and 10 presented as written numerals.</p> <p>Describe and compare measurable attributes.</p> <p>K.MD.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.</p> <p>K.MD.2 Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. <i>For example, directly compare the heights of two children and describe one child as taller/shorter.</i></p>
<p>Module 4: Number Pairs, Addition and Subtraction to 10 (47 days)</p>	<p>Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.</p> <p>K.OA.1 Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. (Drawings need not show details, but should show the mathematics in the problem.)</p> <p>K.OA.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.</p>

¹⁴The balance of this cluster is addressed in Module 6.

Module and Approximate Number of Instructional Days	Standards Addressed in Kindergarten Modules
	<p>K.OA.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).</p> <p>K.OA.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings and record the answer with a drawing or equation.</p> <p>K.OA.5 Fluently add and subtract within 5.¹⁵</p>
<p>Module 5: Numbers 10–20 and Counting to 100 (30 days)</p>	<p>Know number names and the count sequence.</p> <p>K.CC.1 Count to 100 by ones and by tens.</p> <p>K.CC.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1).</p> <p>K.CC.3 Write numbers from 0 to 20. Represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects).</p> <p>Count to tell the number of objects.¹⁶</p> <p>K.CC.4 Understand the relationship between numbers and quantities; connect counting to cardinality.</p> <p>b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.</p> <p>c. Understand that each successive number name refers to a quantity that is one larger.</p> <p>K.CC.5 Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.</p>

¹⁵ From this point forward, fluency practice is part of students’ on-going experience.

¹⁶ K.CC.4a, K.CC.4b, and K.CC.4c are addressed in Module 1; K.CC.4d is addressed in Module 6.

Module and Approximate Number of Instructional Days	Standards Addressed in Kindergarten Modules
	<p>Work with numbers 11–19 to gain foundations for place value.</p> <p>K.NBT.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings and record each composition or decomposition by a drawing or equation (such as $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two three, four, five, six, seven, eight or nine ones.</p>
<p>Module 6: Analyzing, Comparing, and Composing Shapes (10 days)</p>	<p>Count to tell the number of objects.¹⁷</p> <p>K.CC.4 Understand the relationship between numbers and quantities: connect counting to cardinality.</p> <p>d. Develop understanding of ordinal numbers (first through tenth) to describe the relative position and magnitude of whole numbers.¹⁸</p> <p>Analyze, compare, create and compose shapes.¹⁹</p> <p>K.G.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.</p> <p>K.G.6 Compose simple shapes to form larger shapes. <i>For example, “Can you join these two triangles with full sides touching to make a rectangle?”</i></p>

¹⁷ Ordinality is introduced in the context of constructing and manipulating shapes. The balance of this cluster is addressed in Modules 1 and 5.

¹⁸ K.CC.4d originates from the New York State Common Core Learning Standards and is not part of the CCSS-M.

¹⁹ K.G.4 is addressed in Module 2.

Sequence of Grade 1 Modules Aligned with the Standards

Module 1: Sums and Differences to 10

Module 2: Introduction to Place Value Through Addition and Subtraction Within 20

Module 3: Ordering and Comparing Length Measurements as Numbers

Module 4: Place Value, Comparison, Addition and Subtraction to 40

Module 5: Identifying, Composing, and Partitioning Shapes

Module 6: Place Value, Comparison, Addition and Subtraction to 100

Summary of Year

Grade 1 mathematics is about (1) developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; (2) developing understanding of whole number relationships and place value, including grouping in tens and ones; (3) developing understanding of linear measurement and measuring lengths as iterating length units; and (4) reasoning about attributes of, and composing and decomposing geometric shapes.

Key Areas of Focus for K–2: Addition and subtraction—concepts, skills, and problem solving

Required Fluency: 1.OA.6 Add and subtract within 10.

Major Emphasis Clusters

Operations and Algebraic Thinking

- Represent and solve problems involving addition and subtraction.
- Understand and apply properties of operations and the relationship between addition and subtraction.
- Add and subtract within 20.
- Work with addition and subtraction equations.

Number and Operations in Base Ten

- Extend the counting sequence.
- Understand place value.
- Use place value understanding and properties of operations to add and subtract.

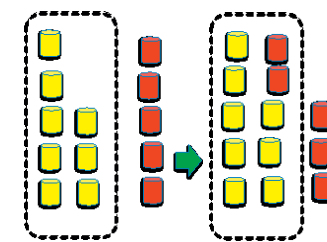
Measurement and Data

- Measure lengths indirectly and by iterating length units.

Rationale for Module Sequence in Grade 1

In Grade 1, work with numbers to 10 continues to be a major stepping-stone in learning the place value system. In Module 1, students work to further understand the meaning of addition and subtraction begun in Kindergarten, largely within the context of the Grade 1 word problem types. They begin intentionally and energetically building fluency with addition and subtraction facts—a major gateway to later grades.

In Module 2, students add and subtract within 20. Work begins by modeling *adding and subtracting across ten* in word problems and with equations. Solutions involving decomposition and composition like that shown to the right for $8 + 5$ reinforce the need to *make 10*. In Module 1, students grouped 10 objects, saw numbers 0 to 9 in relationship to ten, added to make ten, and subtracted from ten. They now transition to conceptualizing that ten as a single unit (e.g., using 10 linking cubes stuck together). This is the next major stepping-stone in understanding place value, learning to group *10 ones* as a single unit: 1 ten. Learning to *complete a unit* empowers students in later grades to understand *renaming* in the addition algorithm, to add 298 and 35 mentally (i.e., $298 + 2 + 33$), and to add measurements like 4 m, 80 cm, and 50 cm (i.e., $4 \text{ m} + 80 \text{ cm} + 20 \text{ cm} + 30 \text{ cm} = 4 \text{ m} + 1 \text{ m} + 30 \text{ cm} = 5 \text{ m } 30 \text{ cm}$).



$$8 + 5 = 8 + (2 + 3) = (8 + 2) + 3 = 10 + 3 = 13$$

Adding Across a Ten

Module 3, which focuses on measuring and comparing lengths indirectly and by iterating length units, gives students a few weeks to practice and internalize *making a 10* during daily fluency activities.

Module 4 returns to understanding place value. Addition and subtraction within 40 rest on firmly establishing a *ten* as a unit that can be counted, first introduced at the close of Module 2. Students begin to see a problem like $23 + 6$ as an opportunity to separate the 2 tens in 23 and concentrate on the familiar addition problem $3 + 6$. Adding $8 + 5$ is related to solving $28 + 5$; complete a unit of ten and add 3 more.

In Module 5, students think about attributes of shapes and practice composing and decomposing geometric shapes. They also practice working with addition and subtraction within 40 during daily fluency activities (from Module 4). Thus, this module provides important internalization time for students between two intense number-based modules. The module placement also gives more spatially-oriented students the opportunity to build their confidence before they return to arithmetic.

Although Module 6 focuses on *adding and subtracting within 100*, the learning goal differs from the *within 40* module. Here, the new level of complexity is to build off the place value understanding and mental math strategies that were introduced in earlier modules. Students explore by using simple examples and the familiar units of 10 made out of linking cubes, bundles, and drawings. Students also count to 120 and represent any number within that range with a numeral.

Alignment Chart²⁰

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 1 Modules
<p>Module 1: Sums and Differences to 10²¹ (45 days)</p>	<p>Represent and solve problems involving addition and subtraction.²²</p> <p>1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart and comparing, with unknowns in all positions, e.g., by using objects, drawings and equations with a symbol for the unknown number to represent the problem. (See Standards Glossary, Table 1.)</p> <p>Understand and apply properties of operations and the relationship between addition and subtraction.</p> <p>1.OA.3 Apply properties of operations as strategies to add and subtract. (Students need not use formal terms for these properties.) <i>Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)</i></p> <p>1.OA.4 Understand subtraction as an unknown-addend problem. <i>For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.</i></p> <p>Add and subtract within 20.</p> <p>1.OA.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).</p> <p>1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).</p>

²⁰ When a cluster is referred to in this chart without a footnote, the cluster is addressed in its entirety.

²¹ In this module, work is limited to within 10.

²² 1.OA.2 is addressed in Module 2.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 1 Modules
	<p>Work with addition and subtraction equations.</p> <p>1.OA.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. <i>For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.</i></p> <p>1.OA.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = _ - 3$, $6 + 6 = _$.</i></p>
<p>Module 2: Introduction to Place Value Through Addition and Subtraction Within 20 (35 days)</p>	<p>Represent and solve problems involving addition and subtraction.</p> <p>1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. (See Standards Glossary, Table 1.)</p> <p>1.OA.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</p> <p>Understand and apply properties of operations and the relationship between addition and subtraction.</p> <p>1.OA.3 Apply properties of operations as strategies to add and subtract. (Students need not use formal terms for these properties.) <i>Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)</i></p> <p>1.OA.4 Understand subtraction as an unknown-addend problem. <i>For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.</i></p>

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 1 Modules
	<p>Add and subtract within 20.²³</p> <p>1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).</p> <p>Understand place value.²⁴</p> <p>1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:</p> <ol style="list-style-type: none"> 10 can be thought of as a bundle of ten ones—called a “ten.” The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
<p>Module 3: Ordering and Comparing Length Measurements as Numbers (15 days)</p>	<p>Represent and solve problems involving addition and subtraction.²⁵</p> <p>1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. (See Standards Glossary, Table 1.)</p> <p>Measure lengths indirectly and by iterating length units.</p> <p>1.MD.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.</p>

²³ From this point forward, fluency practice is part of students’ on-going experience; the balance of this cluster is addressed in Module 1.

²⁴ Focus in this module is on numbers to 20. The balance of this cluster is addressed in Modules 4 and 6.

²⁵ The balance of this cluster is addressed in Module 2.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 1 Modules
	<p>1.MD.2 Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. <i>Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.</i></p> <p>Represent and interpret data.</p> <p>1.MD.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.</p>
<p>Module 4: Place Value, Comparison, Addition and Subtraction to 40 ²⁶ (35 days)</p>	<p>Represent and solve problems involving addition and subtraction.²⁷</p> <p>1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. (See Standards Glossary, Table 1.)</p> <p>Extend the counting sequence.²⁸</p> <p>1.NBT.1 Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.</p> <p>Understand place value.²⁹</p> <p>1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:</p> <ol style="list-style-type: none"> 10 can be thought of as a bundle of ten ones—called a “ten.”

²⁶ While pennies and dimes are used throughout the module, 1.MD.3 is not a focus grade level standard in Module 4. Instead, this standard becomes a focal standard in Module 6, when all coins are introduced and used.

²⁷ The balance of this cluster is addressed in Module 2.

²⁸ Focus on numbers to 40.

²⁹ Focus on numbers to 40; 1.NBT.2b is addressed in Module 2.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 1 Modules
	<p>c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).</p> <p>1.NBT.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.</p> <p>Use place value understanding and properties of operations to add and subtract.³⁰</p> <p>1.NBT.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.</p> <p>1.NBT.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.</p> <p>1.NBT.6 Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p>
<p>Module 5: Identifying, Composing, and Partitioning Shapes (15 days)</p>	<p>Tell and write time and money.³¹</p> <p>1.MD.3 Tell and write time in hours and half-hours using analog and digital clocks. Recognize and identify coins, their names, and their value.</p> <p>Reason with shapes and their attributes.</p> <p>1.G.1 Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.</p>

³⁰ Focus on numbers to 40.

³¹ Time alone is addressed in this module. Although money is not addressed until Grade 2 in the CCSS-M, it is addressed in Grade 1 Module 6.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 1 Modules
	<p>1.G.2 Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. (Students do not need to learn formal names such as “right rectangular prism.”)</p> <p>1.G.3 Partition circles and rectangles into two and four equal shares, describe the shares using the words <i>halves</i>, <i>fourths</i>, and <i>quarters</i>, and use the phrases <i>half of</i>, <i>fourth of</i>, and <i>quarter of</i>. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.</p>
<p>Module 6: Place Value, Comparison, Addition and Subtraction to 100 (35 days)</p>	<p>Represent and solve problems involving addition and subtraction.³²</p> <p>1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. (See Standards Glossary, Table 1.)</p> <p>Extend the counting sequence.</p> <p>1.NBT.1 Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.</p> <p>Understand place value.³³</p> <p>1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:</p> <ol style="list-style-type: none"> a. 10 can be thought of as a bundle of ten ones—called a “ten.” c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).

³²The balance of this cluster is addressed in Module 2.

³³1.NBT.2b is addressed in Module 2.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 1 Modules
	<p>1.NBT.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.</p> <p>Use place value understanding and properties of operations to add and subtract.</p> <p>1.NBT.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.</p> <p>1.NBT.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count: explain the reasoning used.</p> <p>1.NBT.6 Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p> <p>Tell and write time and money.³⁴</p> <p>1.MD.3 Tell and write time in hours and half-hours using analog and digital clocks. Recognize and identify coins, their names, and their value.</p>

³⁴ Although money is not addressed until Grade 2 in the CCSS-M, money is addressed in this module. Time is addressed in Module 5.

Sequence of Grade 2 Modules Aligned with the Standards

Module 1: Sums and Differences to 100

Module 2: Addition and Subtraction of Length Units

Module 3: Place Value, Counting, and Comparison of Numbers to 1,000

Module 4: Addition and Subtraction Within 200 with Word Problems to 100

Module 5: Addition and Subtraction Within 1,000 with Word Problems to 100

Module 6: Foundations of Multiplication and Division

Module 7: Problem Solving with Length, Money, and Data

Module 8: Time, Shapes, and Fractions as Equal Parts of Shapes

Summary of Year

Grade 2 mathematics is about (1) extending understanding of base-ten notation; (2) building fluency with addition and subtraction; (3) using standard units of measure; and (4) describing and analyzing shapes.

Key Areas of Focus for K–2: Addition and subtraction—concepts, skills, and problem solving

Required Fluency:

2.OA.2	Add and subtract within 20.
2.NBT.5	Add and subtract within 100.

Major Emphasis Clusters

Operations and Algebraic Thinking

- Represent and solve problems involving addition and subtraction.
- Add and subtract within 20.

Number and Operations in Base Ten

- Understand place value.
- Use place value understanding and properties of operations to add and subtract.

Measurement and Data

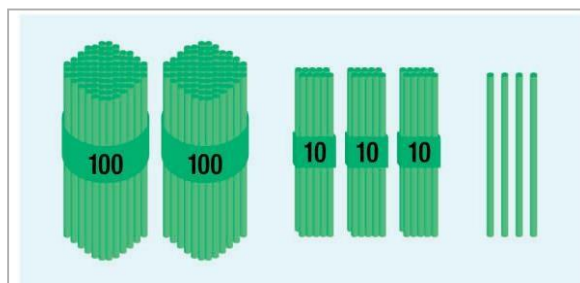
- Measure and estimate lengths in standard units.
- Relate addition and subtraction to length.

Rationale for Module Sequence in Grade 2

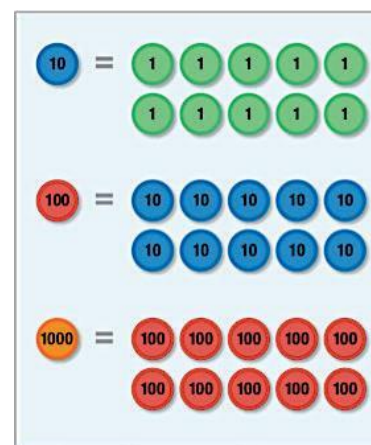
From Grade 1, students have fluency of addition and subtraction within 10 and extensive experience working with numbers to 100. Module 1 of Grade 2 establishes a motivating, differentiated fluency program in the first few weeks that will provide each student with enough practice to achieve mastery of the new required fluencies (i.e., adding and subtracting within 20 and within 100) by the end of the year. Students also solve all addition and subtraction word problem situations (See the Standards Glossary, Table 1) that do not involve comparison using the Read-Draw-Write process, a practice that will also continue throughout the year. Though encouraged to use math drawings that are intuitive for them, each situation is also modeled using the tape diagram, encouraging students to generalize and analyze part–whole relationships.

In Module 2, students learn to measure and estimate using standard units for length and solve measurement problems involving addition and subtraction of length, now encountering the word problem situations involving comparison. A major objective is for students to use measurement tools with the understanding that linear measure involves an iteration of units and that the smaller a unit, the more iterations are necessary to cover a given length. Students work exclusively with metric units (e.g., centimeters and meters) in this module to support upcoming work with place value concepts in Module 3. Units also play a central role in the addition and subtraction algorithms of Modules 4 and 5. An underlying goal for this module is for students to learn the meaning of a *unit* in a different context, that of length. This understanding serves as the foundation of arithmetic, measurement, and geometry in elementary school. Students also solve word problems involving all addition and subtraction comparison situations, so that by the end of Module 2, they have encountered the full set of situations.

All arithmetic algorithms are manipulations of place value units: ones, tens, hundreds, etc. In Module 3, students extend their understanding of base-ten notation and apply their understanding of place value to count and compare numbers to 1,000. In Grade 2, the place value units move from a proportional model to a non-proportional number disk model (see the pictures below). The place value table with number disks can be used through Grade 5 for modeling very large numbers and decimals, thus providing students greater facility with, and understanding of, mental math and algorithms.



Proportional Model for Place Value



Non-Proportional Model for Place Value

In Module 4, students apply their work with place value units to add and subtract within 200, moving from concrete to pictorial to abstract. This work deepens their understanding of base ten, place value, and the properties of operations. It also challenges them to apply their knowledge to one-step and two-step word problems. During this module, students also continue to develop one of the required fluencies of the grade: addition and subtraction within 100.

Module 5 builds upon the work of Module 4. Students again use place value strategies, manipulatives, and math drawings to extend their conceptual understanding of the addition and subtraction algorithms to numbers within 1,000. They maintain addition and subtraction fluency within 100 through daily application work to solve one- and two-step word problems of all types. A key component of Modules 4 and 5 is that students use place value reasoning to explain why their addition and subtraction strategies work.

In Module 6, students extend their understanding of a unit to build the foundation for multiplication and division wherein any number, not just powers of ten, can be a unit. Making equal groups of *four apples each* establishes the unit *four apples* (or just *four*) that can then be counted: *1 four, 2 fours, 3 fours*, etc. Relating the new unit to the one used to create it lays the foundation for multiplication: *3 groups of 4 apples equal 12 apples* (or *3 fours is 12*).

Module 7 provides another opportunity for students to practice their algorithms and problem-solving skills with perhaps the most well-known, interesting units of all: dollars, dimes, pennies, quarters, and nickels. Measuring and estimating length is revisited in this module in the context of units from both the customary system (e.g., inches and feet) and the metric system (e.g., centimeters and meters). As they study money and length, students represent data given by measurement and money data using picture graphs, bar graphs, and line plots.

Students finish Grade 2 by describing and analyzing shapes in terms of their sides and angles. In Module 8, students investigate, describe, and reason about the composition and decomposition of shapes to form other shapes. Through building, drawing, and analyzing two- and three-dimensional shapes, students develop a foundation for understanding area, volume, congruence, similarity, and symmetry in later grades.

Alignment Chart³⁵

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 2 Modules
<p>Module 1: Sums and Differences to 100 (10 days)</p>	<p>Represent and solve problems involving addition and subtraction.³⁶</p> <p>2.OA.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. (See Standards Glossary, Table 1.)</p> <p>Add and subtract within 20.³⁷</p> <p>2.OA.2 Fluently add and subtract within 20 using mental strategies. (See standard 1.OA.6 for a list of mental strategies.) By end of Grade 2, know from memory all sums of two one-digit numbers.</p> <p>Use place value understanding and properties of operations to add and subtract.³⁸</p> <p>2.NBT.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p>
<p>Module 2: Addition and Subtraction of Length Units (12 days)</p>	<p>Measure and estimate lengths in standard units.³⁹</p> <p>2.MD.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.</p> <p>2.MD.2 Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.</p> <p>2.MD.3 Estimate lengths using units of inches, feet, centimeters, and meters.</p>

³⁵ When a cluster is referred to in this chart without a footnote, the cluster is addressed in its entirety.

³⁶ In this module, word problems focus primarily on result unknown and change unknown situations.

³⁷ From this point forward, fluency practice with addition and subtraction to 20 is part of students' ongoing experience.

³⁸ This standard is addressed again in Modules 4 and 7; the balance of this cluster is addressed in Modules 4 and 5.

³⁹ Focus is on metric measurement in preparation for place value in Module 3. Customary measurement is addressed in Module 7.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 2 Modules
	<p>2.MD.4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.</p> <p>Relate addition and subtraction to length.</p> <p>2.MD.5 Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.</p> <p>2.MD.6 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.</p>
<p>Module 3: Place Value, Counting, and Comparison of Numbers to 1,000 (25 days)</p>	<p>Understand place value.</p> <p>2.NBT.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:</p> <ol style="list-style-type: none"> 100 can be thought of as a bundle of ten tens—called a “hundred.” The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones). <p>2.NBT.2 Count within 1000; skip-count by 5s⁴⁰, 10s, and 100s.</p> <p>2.NBT.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.</p> <p>2.NBT.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p>

⁴⁰ Use an analog clock to provide a context for skip-counting by fives.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 2 Modules
<p>Module 4: Addition and Subtraction Within 200 with Word Problems to 100 (35 days)</p>	<p>Represent and solve problems involving addition and subtraction.</p> <p>2.OA.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. (See Standards Glossary, Table 1.)</p> <p>Use place value understanding and properties of operations to add and subtract.⁴¹</p> <p>2.NBT.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p> <p>2.NBT.6 Add up to four two-digit numbers using strategies based on place value and properties of operations.</p> <p>2.NBT.7 Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.</p> <p>2.NBT.8 Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.</p> <p>2.NBT.9 Explain why addition and subtraction strategies work, using place value and the properties of operations. (Explanations may be supported by drawings or objects.)</p>
<p>Module 5: Addition and Subtraction Within 1,000 with Word Problems to 100 (24 days)</p>	<p>Use place value understanding and properties of operations to add and subtract.⁴²</p> <p>2.NBT.7 Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is</p>

⁴¹ In this module, work is limited to within 200. This work is extended to numbers within 1,000 in the next module.

⁴² The balance of this cluster is addressed in Modules 1, 4, and 7.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 2 Modules
	<p>necessary to compose or decompose tens or hundreds.</p> <p>2.NBT.8 Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.</p> <p>2.NBT.9 Explain why addition and subtraction strategies work, using place value and the properties of operations. (Explanations may be supported by drawings or objects.)</p>
<p>Module 6: Foundations of Multiplication and Division (24 days)</p>	<p>Work with equal groups of objects to gain foundations for multiplication.</p> <p>2.OA.3 Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.</p> <p>2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.</p> <p>Reason with shapes and their attributes.⁴³</p> <p>2.G.2 Partition a rectangle into rows and columns of same size squares and count to find the total number of them.</p>
<p>Module 7: Problem Solving with Length, Money, and Data (30 days)</p>	<p>Use place value understanding and properties of operations to add and subtract.⁴⁴</p> <p>2.NBT.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p> <p>Measure and estimate lengths in standard units.</p> <p>2.MD.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.</p>

⁴³ 2.G.2 is included in this module because the array model is so important to the foundation for multiplication. The balance of this cluster is addressed in Module 8.

⁴⁴ This standard is also addressed in Modules 1 and 4; the balance of this cluster is addressed in Modules 4 and 5.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 2 Modules
	<p>2.MD.2 Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.</p> <p>2.MD.3 Estimate lengths using units of inches, feet, centimeters, and meters.</p> <p>2.MD.4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.</p> <p>Relate addition and subtraction to length.</p> <p>2.MD.5 Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.</p> <p>2.MD.6 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.</p> <p>Work with time and money.⁴⁵</p> <p>2.MD.8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. <i>Example: If you have 2 dimes and 3 pennies, how many cents do you have?</i></p> <p>Represent and interpret data.</p> <p>2.MD.9 Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.</p> <p>2.MD.10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems (See Standards Glossary, Table 1.) using information presented in a bar graph.</p>

⁴⁵Focus on money. Time is addressed in Module 8.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 2 Modules
<p>Module 8: Time, Shapes, and Fractions as Equal Parts of Shapes (20 days)</p>	<p>Work with time and money.⁴⁶</p> <p>2.MD.7 Tell time and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.</p> <p>Reason with shapes and their attributes.⁴⁷</p> <p>2.G.1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. (Sizes are compared directly or visually, not compared by measuring.) Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.</p> <p>2.G.3 Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words <i>halves</i>, <i>thirds</i>, <i>half of</i>, <i>a third of</i>, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.</p>

⁴⁶ Focus on time. Money is addressed in Module 7.

⁴⁷ 2.G.2 is addressed in Module 6.

Sequence of Grade 3 Modules Aligned with the Standards

Module 1: Properties of Multiplication and Division and Solving Problems with Units of 2–5 and 10

Module 2: Place Value and Problem Solving with Units of Measure

Module 3: Multiplication and Division with Units of 0, 1, 6–9, and Multiples of 10

Module 4: Multiplication and Area

Module 5: Fractions as Numbers on the Number Line

Module 6: Collecting and Displaying Data

Module 7: Geometry and Measurement Word Problems

Summary of Year

Grade 3 mathematics is about (1) developing understanding of multiplication and division and strategies for multiplication and division within 100; (2) developing understanding of fractions, especially unit fractions (fractions with a numerator of 1); (3) developing understanding of the structure of rectangular arrays and of area; and (4) describing and analyzing two-dimensional shapes.

Key Areas of Focus for 3–5: Multiplication and division of whole numbers and fractions—concepts, skills, and problem solving

Required Fluency: 3.OA.7 Multiply and divide within 100.
3.NBT.2 Add and subtract within 1000.

Major Emphasis Clusters

Operations and Algebraic Thinking

- Represent and solve problems involving multiplication and division.
- Understand the properties of multiplication and the relationship between multiplication and division.
- Multiply and divide within 100.
- Solve problems involving the four operations and identify and explain patterns in arithmetic.

Number and Operations—Fractions

- Develop understanding of fractions as numbers.

Measurement and Data

- Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.
- Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

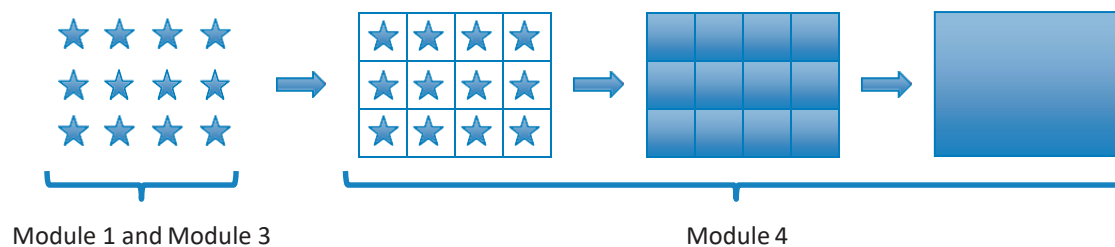
Rationale for Module Sequence in Grade 3

The first module builds upon the foundation of multiplicative thinking with units started in Grade 2. First, students concentrate on the meaning of multiplication and division and begin developing fluency for learning products involving factors of 2, 3, 4, 5, and 10 (see Key Areas of Focus and

Required Fluency above). The restricted set of facts keeps learning manageable, and also provides enough examples to do one- and two-step word problems and to start measurement problems involving weight, capacity, and time in the second module.

Module 2 focuses on measurement of time and metric weight and capacity. In exploratory lessons, students decompose a kilogram into 100 gram, 10 gram, and 1 gram weights and decompose a liter into analogous amounts of milliliters. Metric measurement thereby develops the concept of mixed units (e.g., 3 kilograms 400 grams is clearly related to 3 thousands, 4 hundreds). Students then apply their new understanding of number to place value, comparison and rounding, composing larger units when adding, decomposing into smaller units when subtracting. Students also draw proportional tape diagrams to solve word problems (e.g., “If this tape represents 62 kg, then a tape representing 35 kg needs to be slightly longer than half the 62 kg bar ...”). Drawing the relative sizes of the lengths involved in the model prepares students to locate fractions on a number line in Module 5 (where they learn to locate points on the number line relative to each other and relative to the whole unit). Module 2 also provides students with internalization time for learning the 2, 3, 4, 5, and 10 facts as part of their fluency activities.

Students learn the remaining multiplication and division facts in Module 3 as they continue to develop their understanding of multiplication and division strategies within 100 and use those strategies to solve two-step word problems. The “2, 3, 4, 5, and 10 facts” module (Module 1) and the “0, 1, 6, 7, 8, 9, and multiples of 10 facts” module (Module 3) both provide important, sustained time for work in understanding the structure of rectangular arrays to prepare students for area in Module 4. This work is necessary because students initially find it difficult to distinguish the different units in a grid (the third array in the picture below), count them, and recognize that the count is related to multiplication. Tiling also supports a correct interpretation of the grid. Modules 1 and 3 slowly build up to the area model (the fourth model in the picture below), using rectangular arrays in the context of learning multiplication and division:



Progression from Rectangular Array to Area Model

By Module 4, students are ready to investigate area. They measure the area of a shape by finding the total number of same-size units of area (e.g., tiles) required to cover the shape without gaps or overlaps. When that shape is a rectangle with whole number side lengths, it is easy to partition the rectangle into squares with equal areas (as in the third stage of the illustration above).

One goal of Module 5 is for students to transition from thinking of fractions as area or parts of a figure to points on a number line and finally, as numbers. To make that jump, students think of fractions as being constructed out of unit fractions: *1 fourth* is the length of a segment on the number line such that the length of four concatenated fourth segments on the line equals 1 (the whole). Once the unit *1 fourth* has been established, counting them is as easy as counting whole numbers: 1 fourth, 2 fourths, 3 fourths, 4 fourths, 5 fourths, etc. Students also compare fractions, find equivalent fractions in special cases, and solve problems that involve fractions. They realize that equivalent fractions share the same point on the number line.

In Module 6, by applying their knowledge of fractions from Module 5, students round lengths to the nearest halves and fourths of an inch and record that information on line plots. This module also prepares students for the multiplicative comparison problems of Grade 4 by asking students “how many more” and “how many less” questions about scaled bar graphs.

The year rounds out with plenty of time to solve two-step word problems involving the four operations and to improve fluency for concepts and skills initiated earlier in the year. In Module 7, students also describe, analyze, and compare properties of two-dimensional shapes. By now, students have done enough work with both linear and area measurement models to understand that there is no relationship in general between the area of a figure and its perimeter, which is one of the concepts taught in the last module.

Alignment Chart⁴⁸

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 3 Modules
Module 1: Properties of Multiplication and Division and Solving Problems with Units of 2–5 and 10 (25 days)	Represent and solve problems involving multiplication and division.⁴⁹ 3.OA.1 Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. <i>For example, describe a context in which a total number of objects can be expressed as 5×7.</i> 3.OA.2 Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. <i>For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$.</i>

⁴⁸ When a cluster is referred to in this chart without a footnote, the cluster is addressed in its entirety.

⁴⁹ In this module, work is limited to factors of 2–5 and 10 and the corresponding dividends.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 3 Modules
	<p>3.OA.3 Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. (See Standards Glossary, Table 2.)</p> <p>3.OA.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = _ \div 3$, $6 \times 6 = ?$</i></p> <p>Understand properties of multiplication and the relationship between multiplication and division.⁵⁰</p> <p>3.OA.5 Apply properties of operations as strategies to multiply and divide. (Students need not use formal terms for these properties.) <i>Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)⁵¹</i></p> <p>3.OA.6 Understand division as an unknown-factor problem. <i>For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.</i></p> <p>Multiply and divide within 100.⁵²</p> <p>3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.</p> <p>Solve problems involving the four operations, and identify and explain patterns in arithmetic.⁵³</p> <p>3.OA.8 Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. (This standard</p>

⁵⁰ In this module, work is limited to factors of 2–5 and 10 and the corresponding dividends.

⁵¹ The associative property is addressed in Module 3.

⁵² In this module, work is limited to factors of 2–5 and 10 and the corresponding dividends.

⁵³In this module, problem solving is limited to multiplication and division and limited to factors of 2–5 and 10 and the corresponding dividends. 3.OA.9 is addressed in Module 3.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 3 Modules
	<p>is limited to problems posed with whole numbers and having whole-number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order, i.e., Order of Operations.)</p>
<p>Module 2: Place Value and Problem Solving with Units of Measure (25 days)</p>	<p>Use place value understanding and properties of operations to perform multi-digit arithmetic.⁵⁴</p> <p>3.NBT.1 Use place value understanding to round whole numbers to the nearest 10 or 100.</p> <p>3.NBT.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.</p> <p>Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.</p> <p>3.MD.1 Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.</p> <p>3.MD.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). (Excludes compound units such as cm^3 and finding the geometric volume of a container.) Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem. (Excludes multiplicative comparison problems, i.e., problems involving notions of “times as much”; see Standards Glossary, Table 2.)</p>

⁵⁴ From this point forward, fluency practice with addition and subtraction is part of students’ on-going experience. 3.NBT.3 is addressed in Module 3.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 3 Modules
<p>Module 3: Multiplication and Division with Units of 0, 1, 6–9, and Multiples of 10 (25 days)</p>	<p>Represent and solve problems involving multiplication and division.⁵⁵</p> <p>3.OA.3 Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. (See Standards Glossary, Table 2.)</p> <p>3.OA.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = ___ \div 3$, $6 \times 6 = ?$</i></p> <p>Understand properties of multiplication and the relationship between multiplication and division.⁵⁶</p> <p>3.OA.5 Apply properties of operations as strategies to multiply and divide. (Students need not use formal terms for these properties.) <i>Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)</i></p> <p>Multiply and divide within 100.⁵⁷</p> <p>3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.</p> <p>Solve problems involving the four operations, and identify and explain patterns in arithmetic.⁵⁸</p> <p>3.OA.8 Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. (This standard is limited to problems posed with whole numbers and having whole-number answers; students</p>

⁵⁵The balance of this cluster is addressed in Module 1.

⁵⁶The balance of this cluster is addressed in Module 1.

⁵⁷From this point forward, fluency practice with multiplication and division facts is part of students' on-going experience.

⁵⁸ After being fully taught in Module 3, this standard (as well as 3.OA.3) continues being practiced throughout the remainder of the school year.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 3 Modules
	<p>should know how to perform operations in the conventional order when there are no parentheses to specify a particular order, i.e., Order of Operations.)</p> <p>3.OA.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. <i>For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.</i></p> <p>Use place value understanding and properties of operations to perform multi-digit arithmetic. (A range of algorithms may be used.)⁵⁹</p> <p>3.NBT.3 Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80, 5×60) using strategies based on place value and properties of operations.</p>
<p>Module 4: Multiplication and Area (20 days)</p>	<p>Geometric measurement: understand concepts of area and relate area to multiplication and to addition.</p> <p>3.MD.5 Recognize area as an attribute of plane figures and understand concepts of area measurement.</p> <ol style="list-style-type: none"> A square with side length 1 unit, called “a unit square,” is said to have “one square unit” of area, and can be used to measure area. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units. <p>3.MD.6 Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).</p> <p>3.MD.7 Relate area to the operations of multiplication and addition.</p> <ol style="list-style-type: none"> Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths. Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.

⁵⁹The balance of this cluster is addressed in Module 2.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 3 Modules
	<ul style="list-style-type: none"> c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning. d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.
<p>Module 5: Fractions as Numbers on the Number Line (35 days)</p>	<p>Develop understanding of fractions as numbers. (Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.)</p> <ul style="list-style-type: none"> 3.NF.1 Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$. 3.NF.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram. <ul style="list-style-type: none"> a. Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line. b. Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line. 3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. <ul style="list-style-type: none"> a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. b. Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$, $4/6 = 2/3$. Explain why the fractions are equivalent, e.g., by using a visual fraction model.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 3 Modules
	<p>c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. <i>Examples: Express 3 in the form $3 = 3/1$; recognize that $6/1 = 6$; locate $4/4$ and 1 at the same point of a number line diagram.</i></p> <p>d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.</p> <p>Reason with shapes and their attributes.⁶⁰</p> <p>3.G.2 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area and describe the area of each part as $\frac{1}{4}$ of the area of the shape.</p>
<p>Module 6: Collecting and Displaying Data (10 days)</p>	<p>Represent and interpret data.</p> <p>3.MD.3 Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two- step “how many more” and “how many less” problems using information presented in scaled bar graphs. <i>For example, draw a bar graph in which each square in the bar graph might represent 5 pets.</i></p> <p>3.MD.4 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.</p>
<p>Module 7: Geometry and Measurement Word Problems⁶¹ (40 days)</p>	<p>Solve problems involving the four operations, and identify and explain patterns in arithmetic.⁶²</p> <p>3.OA.8 Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. (This standard</p>

⁶⁰ 3.G.1 is addressed in Module 7.

⁶¹ The seemingly eclectic set of standards in Module 7 allows for a new level of word problems, including perimeter and measurement word problems.

⁶²3.OA.9 is addressed in Module 3.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 3 Modules
	<p>is limited to problems posed with whole numbers and having whole-number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order, i.e., Order of Operations.)</p> <p>Represent and interpret data.⁶³</p> <p>3.MD.4 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.</p> <p>Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.</p> <p>3.MD.8 Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.</p> <p>Reason with shapes and their attributes.⁶⁴</p> <p>3.G.1 Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.</p>

⁶³ 3.MD.3 is addressed in Module 6.

⁶⁴ 3.G.2 is addressed in Module 5.

Sequence of Grade 4 Modules Aligned with the Standards

Module 1: Place Value, Rounding, and Algorithms for Addition and Subtraction

Module 2: Unit Conversions and Problem Solving with Metric Measurement

Module 3: Multi-Digit Multiplication and Division

Module 4: Angle Measure and Plane Figures

Module 5: Fraction Equivalence, Ordering, and Operations

Module 6: Decimal Fractions

Module 7: Exploring Measurement with Multiplication

Summary of Year

Grade 4 mathematics is about (1) developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends; (2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; and (3) understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.

Key Areas of Focus for 3–5: Multiplication and division of whole numbers and fractions—concepts, skills, and problem solving

Required Fluency: 4.NBT.4 Add and subtract within 1,000,000.

Major Emphasis Clusters	
Operations and Algebraic Thinking	<ul style="list-style-type: none"> Use the four operations with whole numbers to solve problems.
Number and Operations in Base Ten	<ul style="list-style-type: none"> Generalize place value understanding for multi-digit whole numbers. Use place value understanding and properties of operations to perform multi-digit arithmetic.
Number and Operations—Fractions	<ul style="list-style-type: none"> Extend understanding of fraction equivalence and ordering. Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. Understand decimal notation for fractions, and compare decimal fractions.

Rationale for Module Sequence in Grade 4

In Grade 4, students extend their work with whole numbers. They begin with large numbers using familiar units (tens and hundreds) and develop their understanding of thousands by building knowledge of the pattern of *times ten* in the base-ten system on the place value chart (**4.NBT.1**). In

Grades 2 and 3, students focused on developing the concept of composing and decomposing place value units within the addition and subtraction algorithms. Now, in Grade 4, those (de)compositions are seen through the lens of multiplicative comparison (e.g., 1 thousand is 10 times as much as 1 hundred). They next apply their broadened understanding of patterns on the place value chart to compare, round, add, and subtract. The addition and subtraction algorithms are then efficient and useful applications of students' knowledge of and skill with composing and decomposing higher value units. The module culminates with solving multi-step word problems involving addition and subtraction modeled with tape diagrams that focus on numerical relationships.

The algorithms continue to play a part in Module 2 as students relate place value units to metric units. This module helps students draw similarities between:

1 ten	= 10 ones
1 hundred	= 10 tens
1 hundred	= 100 ones
1 meter	= 100 centimeters
1 thousand	= 1,000 ones
1 kilometer	= 1,000 meters
1 kilogram	= 1,000 grams
1 liter	= 1,000 milliliters

Students work with metric measurement in the context of the addition and subtraction algorithms, mental math, place value, and word problems. Customary units are used as a context for fractions in Modules 5 and 7.

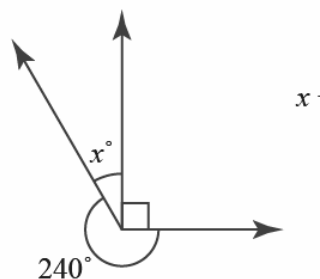
In Module 3, measurement of perimeter and area provide the concrete foundation behind the distributive property in the multiplication algorithm: $4 \times (1 \text{ m } 2 \text{ cm})$ can be modeled concretely using ribbon, since it is easy to see the 4 copies of 1 meter and the 4 copies of 2 centimeters. Likewise, $4 \times (1 \text{ ten } 2 \text{ ones}) = 4 \text{ tens } 8 \text{ ones}$. Students next use place value disks to develop efficient procedures and the algorithms for multiplying and dividing one-digit whole numbers. They understand and explain why the procedures work, and connections are made between the area model and work on the place value chart. Two-digit by two-digit multiplication is then modeled using the area model, extending students' earlier experiences with measurement and the distributive property. Students also solve word problems throughout the module where they select and accurately apply appropriate methods to estimate, mentally calculate, or use written strategies to compute products and quotients.

Module 4 focuses as much on solving unknown angle problems using letters and equations as it does on building, drawing, and analyzing two-dimensional shapes in geometry. Students have already used letters and equations to solve word problems in earlier grades. They continue to do so in Grade 4, and now they also learn to solve unknown angle problems: work that challenges students to build and solve equations to find unknown angle measures. First, students learn the definition of degree and learn how to measure angles in degrees using a circular protractor. From the definition of degree and the fact that angle measures are additive, the following rudimentary facts about angles naturally follow:

1. The sum of angle measurements around a point is 360 degrees.
2. The sum of angle measurements on a line is 180 degrees.

Hence, from 1 and 2, students see that vertical angles are equal. Armed only with these facts, students are able to generate and solve equations as in the following problem:

Find the unknown angle x .



$$xx + 240 + 90 = 360$$

$$xx + 330 = 360$$

$$xx = 30$$

Unknown angle problems help to unlock algebraic concepts for students because such problems are visual. The xx clearly stands for a specific number. If a student wished, he could place a protractor down on that angle and measure it to find x . But doing so destroys the joy of deducing the answer and solving the puzzle on his own.

Module 5 centers on equivalent fractions and operations with fractions. We use fractions when there is a given unit, the *whole unit*, but we want to measure using a smaller unit, called the *fractional unit*. To prepare students to explore the relationship between a fractional unit and its whole unit, examples of such relationships in different contexts were already carefully established earlier in the year:

360 degrees in	1 complete turn
100 centimeters in	1 meter
1000 grams in	1 kilogram
1000 milliliters in	1 liter

The beauty of fractional units, once defined and understood, is that they behave just as all other units do:

- “3 fourths + 5 fourths = 8 fourths” just as “3 meters + 5 meters = 8 meters”
- “ 4×3 fourths = 12 fourths” just as “ 4×3 meters = 12 meters”

Students add and subtract fractions with like units using the area model and the number line. They multiply a fraction by a whole number where the interpretation is as repeated addition (e.g., 3 fourths + 3 fourths = 2×3 fourths). Through this introduction to fraction arithmetic they gradually come to understand fractions as units they can manipulate, just like whole numbers. Throughout the module, customary units of measurement provide a relevant context for the arithmetic.

Module 6, on decimal fractions, starts with the realization that decimal place value units are simply special fractional units: 1 tenth = $1/10$, 1 hundredth = $1/100$, etc. Fluency plays an important role in this topic as students learn to relate $3/10 = 0.3 = 3$ tenths. They also recognize that 3 tenths is equal to 30 hundredths and subsequently have their first experience adding and subtracting fractions with unlike units (e.g., 3 tenths + 4 hundredths = 30 hundredths + 4 hundredths).

The year ends with a module focused on multiplication and measurement, as they solve multi-step word problems. Exploratory lessons support conceptual understanding of the relative sizes of measurement units. Students explore conversion in hands-on settings and subsequently apply those conversions to solve multi-step word problems involving all operations and multiplicative comparison.

Alignment Chart⁶⁵

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 4 Modules
Module 1: Place Value, Rounding, and Algorithms for Addition and Subtraction (25 days)	Use the four operations with whole numbers to solve problems. ⁶⁶ 4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

⁶⁵ When a cluster is referred to in this chart without a footnote, the cluster is addressed in its entirety.

⁶⁶ The balance of this cluster is addressed in Modules 3 and 7.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 4 Modules
	<p>Generalize place value understanding for multi-digit whole numbers. (Grade 4 expectations in this domain are limited to whole numbers less than or equal to 1,000,000.)</p> <p>4.NBT.1 Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. <i>For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.</i></p> <p>4.NBT.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p> <p>4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.</p> <p>Use place value understanding and properties of operations to perform multi-digit arithmetic.⁶⁷</p> <p>4.NBT.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm.</p>
<p>Module 2: Unit Conversions and Problem Solving with Metric Measurement (7 days)</p>	<p>Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.⁶⁸</p> <p>4.MD.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. <i>For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...</i></p> <p>4.MD.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.</p>

⁶⁷From this point forward, fluency practice is part of students' on-going experience. The balance of this cluster is addressed in Module 3.

⁶⁸The focus of this module is on the metric system to reinforce place value, mixed units, and word problems with unit conversions. Decimal and fraction word problems wait until Modules 6 and 7. 4.MD.3 is addressed in Module 3.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 4 Modules
<p>Module 3: Multi-Digit Multiplication and Division (43 days)</p>	<p>Use the four operations with whole numbers to solve problems.</p> <p>4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.</p> <p>4.OA.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison. (See Standards Glossary, Table 2.)</p> <p>4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.</p> <p>Gain familiarity with factors and multiples.</p> <p>4.OA.4 Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.</p> <p>Use place value understanding and properties of operations to perform multi-digit arithmetic. (Grade 4 expectations in this domain are limited to whole numbers less than or equal to 1,000,000.)⁶⁹</p> <p>4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>4.NBT.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the</p>

⁶⁹4.NBT.4 is addressed in Module 1 and is then reinforced throughout the year.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 4 Modules
	<p>relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.⁷⁰</p> <p>4.MD.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems. <i>For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.</i></p>
<p>Module 4: Angle Measure and Plane Figures (20 days)</p>	<p>Geometric measurement: understand concepts of angle and measure angles.</p> <p>4.MD.5 Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:</p> <ol style="list-style-type: none"> An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $\frac{1}{360}$ of a circle is called a “one-degree angle,” and can be used to measure angles. An angle that turns through n one-degree angles is said to have an angle measure of n degrees. <p>4.MD.6 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.</p> <p>4.MD.7 Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.</p>

⁷⁰4.MD.1 is addressed in Modules 2 and 7; 4.MD.2 is addressed in Modules 2, 6, and 7.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 4 Modules
	<p>Draw and identify lines and angles, and classify shapes by properties of their lines and angles.</p> <p>4.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.</p> <p>4.G.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.</p> <p>4.G.3 Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.</p>
<p>Module 5: Fraction Equivalence, Ordering, and Operations⁷¹ (45 days)</p>	<p>Generate and analyze patterns.</p> <p>4.OA.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. <i>For example, given the rule “Add 3” and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.</i></p> <p>Extend understanding of fraction equivalence and ordering. (Grade 4 expectations in this domain are limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.)</p> <p>4.NF.1 Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.</p> <p>4.NF.2 Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$. Recognize that comparisons are valid only when the two fractions refer to the same whole.</p>

⁷¹Tenths and hundredths are important fractions in this module, represented in decimal form in Module 6.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 4 Modules
	<p>Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.</p> <p>Build fractions from unit fractions by applying and extending previous understanding of operations on whole numbers.</p> <p>4.NF.3 Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$.</p> <ol style="list-style-type: none"> Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. <i>Examples:</i> $3/8 = 1/8 + 1/8 + 1/8$; $3/8 = 1/8 + 2/8$; $2\ 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8$. Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem. <p>4.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.</p> <ol style="list-style-type: none"> Understand a fraction a/b as a multiple of $1/b$. <i>For example, use a visual fraction model to represent $5/4$ as the product $5 \times (1/4)$, recording the conclusion by the equation $5/4 = 5 \times (1/4)$.</i> Understand a multiple of a/b as a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number. <i>For example, use a visual fraction model to express $3 \times (2/5)$ as $6 \times (1/5)$, recognizing this product as $6/5$. (In general, $n \times (a/b) = (n \times a)/b$.)</i>

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 4 Modules
	<p>c. Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. <i>For example, if each person at a party will eat $\frac{3}{8}$ of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?</i></p> <p>Represent and interpret data.</p> <p>4.MD.4 Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots. <i>For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.</i></p>
<p>Module 6: Decimal Fractions (20 days)</p>	<p>Understand decimal notation for fractions, and compare decimal fractions. (Grade 4 expectations in this domain are limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.)⁷²</p> <p>4.NF.5 Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. (Students who can generate equivalent fractions can develop strategies for adding fractions with unlike denominators in general. But addition and subtraction with unlike denominators in general is not a requirement at this grade.) <i>For example, express $\frac{3}{10}$ as $\frac{30}{100}$, and add $\frac{3}{10} + \frac{4}{100} = \frac{34}{100}$.</i></p> <p>4.NF.6 Use decimal notation for fractions with denominators 10 or 100. <i>For example, rewrite 0.62 as $\frac{62}{100}$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.</i></p> <p>4.NF.7 Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model.</p>

⁷² In this module, we continue to work with fractions, now including decimal form.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 4 Modules
	<p>Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.⁷³</p> <p>4.MD.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.</p>
<p>Module 7: Exploring Measurement with Multiplication (20 days)</p>	<p>Use the four operations with whole numbers to solve problems.</p> <p>4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.</p> <p>4.OA.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison. (See Standards Glossary, Table 2.)</p> <p>4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.</p> <p>Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.⁷⁴</p> <p>4.MD.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a</p>

⁷³ 4.MD.1 is addressed in Modules 2 and 7; 4.MD.3 is addressed in Module 3.

⁷⁴ The focus now is on customary units in word problems for application of fraction concepts. 4.MD.3 is addressed in Module 3.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 4 Modules
	<p>larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. <i>For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...</i></p> <p>4.MD.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.</p>

Sequence of Grade 5 Modules Aligned with the Standards

Module 1: Place Value and Decimal Fractions

Module 2: Multi-Digit Whole Number and Decimal Fraction Operations

Module 3: Addition and Subtraction of Fractions

Module 4: Multiplication and Division of Fractions and Decimal Fractions

Module 5: Addition and Multiplication with Volume and Area

Module 6: Problem Solving with the Coordinate Plane

Summary of Year

Grade 5 mathematics is about (1) developing fluency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions); (2) extending division to two-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations; and (3) developing understanding of volume.

Key Areas of Focus for 3–5: Multiplication and division of whole numbers and fractions—concepts, skills, and problem solving

Required Fluency: 5.NBT.5 Multi-digit multiplication.

Major Emphasis Clusters

Number and Operations in Base Ten

- Understand the place value system.
- Perform operations with multi-digit whole numbers and with decimals to hundredths.

Number and Operations—Fractions

- Use equivalent fractions as a strategy to add and subtract fractions.
- Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

Measurement and Data

- Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

Rationale for Module Sequence in Grade 5

Students' experiences with the algorithms as ways to manipulate place value units in Grades 2–4 really begin to pay dividends in Grade 5. In Module 1, whole number patterns with number disks on the place value chart are easily generalized to decimal numbers. As students work word problems with measurements in the metric system, where the same patterns occur, they begin to appreciate the value and the meaning of decimals. Students apply their work with place value to adding, subtracting, multiplying, and dividing decimal numbers with tenths and hundredths.

Module 2 begins by using place value patterns and the distributive and associative properties to multiply multi-digit numbers by multiples of 10 and leads to fluency with multi-digit whole number multiplication.⁷⁵ For multiplication, students must grapple with and fully understand the distributive property (one of the key reasons for teaching the multi-digit algorithm). While the multi-digit multiplication algorithm is a straightforward generalization of the one-digit multiplication algorithm, the division algorithm with two-digit divisors requires far more care to teach because students have to also learn estimation strategies, error correction strategies, and the idea of successive approximation (all of which are central concepts in math, science, and engineering).

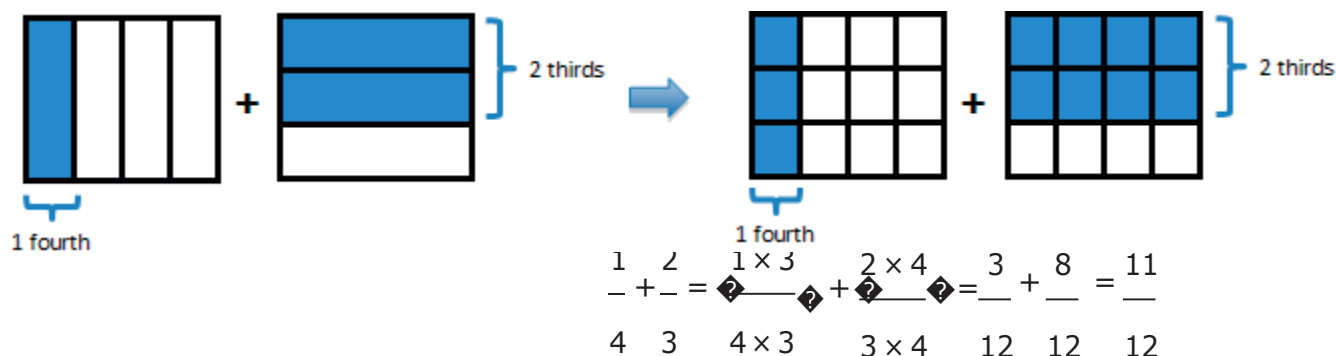
Work with place value units paves the path toward fraction arithmetic in Module 3 as elementary math’s place value emphasis shifts to the larger set of fractional units for algebra. Like units are added to and subtracted from like units:

$$1.5 + 0.8 = 1\frac{5}{10} + \frac{8}{10} = 15 \text{ tenths} + 8 \text{ tenths} = 23 \text{ tenths} = 2 \text{ and } 3 \text{ tenths} = 2\frac{3}{10}$$

$$1\frac{5}{9} + \frac{8}{9} = 14 \text{ ninths} + 8 \text{ ninths} = 22 \text{ ninths} = 2 \text{ and } 4 \text{ ninths} = 2\frac{4}{9}$$

The new complexity is that when units are not equivalent, they must be changed for smaller equal units so that they can be added or subtracted. Probably the best model for showing this is the rectangular fraction model pictured below. The equivalence is then represented symbolically as students engage in active meaning-making rather than obeying the perhaps mysterious command to “multiply the top and bottom by the same number.”

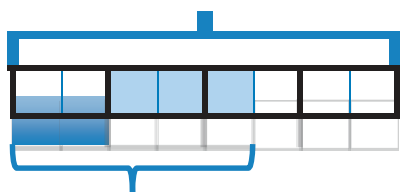
1 boy + 2 girls = 1 child + 2 children = 3 children
 1 fourth + 2 thirds = 3 twelfths + 8 twelfths = 11 twelfths



Relating different fractional units to one another requires extensive work with area and number line diagrams whereas tape diagrams are used often in word problems. Tape diagrams, which students began using in the early grades and which become increasingly useful as students applied them to a greater variety of word problems, hit their full strength as a model when applied to fraction word problems. At the heart of a tape diagram is the now-familiar idea of forming units. In fact, forming units to solve word problems is one of the most powerful examples of the unit theme and is particularly helpful for understanding fraction arithmetic, as in the following example:

Jill had \$32. She gave $\frac{1}{4}$ of her money to charity and $\frac{3}{8}$ of her money to her brother. How much did she give altogether?

\$32



?

Solution with units:

$$8 \text{ units} = \$32$$

$$1 \text{ unit} = \$4$$

Solution with arithmetic:

$$\frac{1}{4} + \frac{3}{8} = \frac{2}{8} + \frac{3}{8} = \frac{5}{8}$$

$$\frac{5}{8} \times 32 = 20$$

Jill gave \$20 altogether.

Near the end of Module 4, students know enough about fractions and whole number operations to begin to explore multi-digit decimal multiplication and division. In multiplying 2.1×3.8 , for example, students now have multiple skills and strategies that they can use to locate the decimal point in the final answer, including:

- Unit awareness: $2.1 \times 3.8 = 21 \text{ tenths} \times 38 \text{ tenths} = 798 \text{ hundredths}$
- Estimation (through rounding): $2.1 \times 3.8 \approx 2 \times 4 = 8$, so $2.1 \times 3.8 = 7.98$
- Fraction multiplication: $2 \times \frac{38}{10} = \frac{21}{10} \times \frac{38}{10} = \frac{21}{10} \times 38 \times \frac{1}{10} = \frac{21}{100} \times 38 \times \frac{1}{10} = \frac{798}{100}$

Similar strategies enrich students' understanding of division and help them to see multi-digit decimal division as whole number division in a different unit. For example, we divide to find, "How many groups of 3 apples are there in 45 apples?" and write $45 \text{ apples} \div 3 \text{ apples} = 15$. Similarly, $4.5 \div 0.3$ can be written as $45 \text{ tenths} \div 3 \text{ tenths}$ with the same answer: *There are 15 groups of 0.3 in 4.5.* This idea was used to introduce fraction division earlier in the module, thus gluing division to whole numbers, fractions, and decimals together through an understanding of units.

Frequent use of the area model in Modules 3 and 4 prepares students for an in-depth discussion of area and volume in Module 5. But the module on

area and volume also reinforces work done in the fraction module. Now, questions about how the area changes when a rectangle is scaled by a whole or fractional scale factor may be asked, and missing fractional sides may be found. Measuring volume once again highlights the unit theme, as a unit cube is chosen to represent a volume unit and used to measure the volume of simple shape composed of regular prisms .

A

In this final module of *A Story of Units*, students connect plane geometry with numerical work to investigate relationships. They construct the coordinate plane, plot points and draw lines. For points on a given line, students discover a common relationship between the x and y coordinates, foreshadowing the proportional reasoning of Grade 6, and later, the slope of a line.

Alignment Chart⁷⁶

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 5 Modules
<p>Module 1: Place Value and Decimal Fractions (20 days)</p>	<p>Understand the place value system.</p> <p>5.NBT.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and $\frac{1}{10}$ of what it represents in the place to its left.</p> <p>5.NBT.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.</p> <p>5.NBT.3 Read, write, and compare decimals to thousandths.</p> <p>a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (\frac{1}{10}) + 9 \times (\frac{1}{100}) + 2 \times (\frac{1}{1000})$.</p> <p>b. Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p> <p>5.NBT.4 Use place value understanding to round decimals to any place.</p> <p>Perform operations with multi-digit whole numbers and with decimals to hundredths.⁷⁷</p> <p>5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p>

⁷⁶When a cluster is referred to in this chart without a footnote, the cluster is addressed in its entirety.

⁷⁷This standard is addressed again in Modules 2 and 4; the balance of this cluster is addressed in Module 2.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 5 Modules
	<p>Convert like measurement units within a given measurement system.⁷⁸</p> <p>5.MD.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.</p>
<p>Module 2: Multi-Digit Whole Number and Decimal Fraction Operations (35 days)</p>	<p>Write and interpret numerical expressions.⁷⁹</p> <p>5.OA.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.</p> <p>5.OA.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. <i>For example, express the calculation “add 8 and 7, then multiply by 2” as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.</i></p> <p>Understand the place value system.⁸⁰</p> <p>5.NBT.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.</p> <p>5.NBT.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.</p> <p>Perform operations with multi-digit whole numbers and with decimals to hundredths.</p> <p>5.NBT.5 Fluently multiply multi-digit whole numbers using the standard algorithm.⁸¹</p> <p>5.NBT.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using</p>

⁷⁸ The focus of this module is on the metric system to reinforce place value and writing measurements using mixed units.

⁷⁹ These skills are also applied to fractions in this module.

⁸⁰ The balance of this cluster is addressed in Module 1.

⁸¹ From this point forward, fluency practice is part of students' on-going experience.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 5 Modules
	<p>equations, rectangular arrays, and/or area models.</p> <p>5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.⁸²</p> <p>Convert like measurement units within a given measurement system.</p> <p>5.MD.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.</p>
<p>Module 3: Addition and Subtraction of Fractions (22 days)</p>	<p>Use equivalent fractions as a strategy to add and subtract fractions.⁸³</p> <p>5.NF.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. <i>For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. (In general, $a/b + c/d = (ad + bc)/bd$.)</i></p> <p>5.NF.2 Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. <i>For example, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$.</i></p>
<p>Module 4: Multiplication and Division of Fractions and Decimal Fractions (38 days)</p>	<p>Write and interpret numerical expressions.</p> <p>5.OA.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.</p>

⁸² Focus on decimal multiplication of a single-digit, whole number factor times a multi-digit number with up to 2 decimal places (e.g., 3×64.98). Restrict decimal division to a single-digit whole number divisor with a multi-digit dividend with up to 2 decimal places (e.g., $64.98 \div 3$). The balance of the standard is addressed in Module 4.

⁸³ Examples in this module also include tenths and hundredths in fraction and decimal form.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 5 Modules
	<p>5.OA.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. <i>For example, express the calculation “add 8 and 7, then multiply by 2” as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.</i></p> <p>Perform operations with multi-digit whole numbers and with decimals to hundredths.⁸⁴</p> <p>5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p> <p>Apply and extend previous understandings of multiplication and division to multiply and divide fractions.⁸⁵</p> <p>5.NF.3 Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. <i>For example, interpret $3/4$ as the result of dividing 3 by 4, noting that $3/4$ multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size $3/4$. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?</i></p> <p>5.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.</p> <p><i>a. Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. For example, use a visual fraction model to show $(2/3) \times 4 = 8/3$, and create a story context for this equation. Do the same with $(2/3) \times (4/5) = 8/15$. (In general, $(a/b) \times (c/d) = ac/bd$.)</i></p>

⁸⁴ The balance of this cluster is addressed in Module 2. Teach problems such as 2.7×2.1 and $4.5 \div 1.5$. See the Progression Document “K–5, Number and Operations in Base Ten” pp. 17–18 (http://commoncoretools.files.wordpress.com/2011/04/ccss_progression_nbt_2011_04_073.pdf).

⁸⁵ 5.NF.4b is addressed in Module 5. Include problems involving decimal fractions throughout the cluster.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 5 Modules
	<p>5.NF.5 Interpret multiplication as scaling (resizing), by:</p> <ol style="list-style-type: none"> Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying a/b by 1. <p>5.NF.6 Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.</p> <p>5.NF.7 Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. (Students able to multiply fractions in general can develop strategies to divide fractions in general, by reasoning about the relationship between multiplication and division. But division of a fraction by a fraction is not a requirement at this grade.)</p> <ol style="list-style-type: none"> Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. <i>For example, create a story context for $(1/3) \div 4$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(1/3) \div 4 = 1/12$ because $(1/12) \times 4 = 1/3$.</i> Interpret division of a whole number by a unit fraction, and compute such quotients. <i>For example, create a story context for $4 \div (1/5)$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div (1/5) = 20$ because $20 \times (1/5) = 4$.</i> Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. <i>For example, how much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $1/3$-cup servings are in 2 cups of raisins?</i>

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 5 Modules
	<p>Convert like measurement units within a given measurement system.⁸⁶</p> <p>5.MD.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.</p> <p>Represent and interpret data.</p> <p>5.MD.2 Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Use operations on fractions for this grade to solve problems involving information presented in line plots. <i>For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.</i></p>
<p>Module 5: Addition and Multiplication with Volume and Area (25 days)</p>	<p>Apply and extend previous understandings of multiplication and division to multiply and divide fractions.⁸⁷</p> <p>5.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.</p> <p>b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.</p> <p>5.NF.6 Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.</p>

⁸⁶The focus of 5.MD.1 in this module is on the customary system of units as a means of introducing fractions (e.g., 1 inch is $\frac{1}{12}$ foot, 1 foot is $\frac{1}{3}$ yard).

⁸⁷The balance of this cluster is addressed in Module 4. In this module, 5.NF.4b is applied to multiplying to find volume and area. 5.NF.4b includes decimal fraction side lengths of sides of a rectangle (in both fraction and decimal form).

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 5 Modules
	<p>Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.</p> <p>5.MD.3 Recognize volume as an attribute of solid figures and understand concepts of volume measurement.</p> <ol style="list-style-type: none"> A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume. A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units. <p>5.MD.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.</p> <p>5.MD.5 Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.</p> <ol style="list-style-type: none"> Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication. Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems. <p>Classify two-dimensional figures into categories based on their properties.</p> <p>5.G.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. <i>For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.</i></p>

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 5 Modules
	<p>5.G.4 Classify two-dimensional figures in a hierarchy based on properties.</p>
<p>Module 6: Problem Solving with the Coordinate Plane (40 days)</p>	<p>Write and interpret numerical expressions.</p> <p>5.OA.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. <i>For example, express the calculation “add 8 and 7, then multiply by 2” as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.</i></p> <p>Analyze patterns and relationships.</p> <p>5.OA.3 Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. <i>For example, given the rule “Add 3” and the starting number 0, and given the rule “Add 6” and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.</i></p> <p>Graph points on the coordinate plane to solve real-world and mathematical problems.</p> <p>5.G.1 Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).</p> <p>5.G.2 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.</p>



A Story of Ratios: A Curriculum Overview for Grades 6–8

Table of Contents

Introduction.....	75
Curriculum Map.....	76
Grade 6.....	77
Grade 7 includes changes to sequencing for AOD	86
Grade 8.....	98

Introduction

This document provides an overview of the academic year for Grades 6 through 8, beginning with a curriculum map and followed by detailed grade-level descriptions.

The curriculum map is a chart that shows, at a glance, the sequence of modules comprising each grade of the Grades 6 through 8 curricula. The map also indicates the approximate number of instructional days designated for each module of each grade. Details that elaborate on the curriculum map are found in the grade-level descriptions.

Each grade-level description begins with a list of the six to seven modules that comprise the instruction of that grade. That introductory component is followed by three sections: the Summary of Year, the Rationale for Module Sequence, and the alignment chart with the grade-level standards.

The Summary of Year portion of each grade level includes four pieces of information:

- The critical instructional areas for the grade, as described in the Common Core State Standards for Mathematics¹(CCSS-M)
- The Key Areas of Focus² for the grade
- The Required Fluencies for the grade
- The Major Emphasis Clusters³ for the grade

The Rationale for Module Sequence portion of each grade level provides a brief description of the instructional focus of each module for that grade and explains the developmental sequence of the mathematics.

The alignment chart for each grade lists the standards that are addressed in each module of the grade. Note that when a cluster is referred to without a footnote, it is taught in its entirety. There are also times when footnotes are relevant to particular standards within a cluster. All standards for each grade have been carefully included in the module sequence. Some standards are deliberately included in more than one module so that a strong foundation can be built over time.

¹http://www.corestandards.org/wp-content/uploads/Math_Standards1.pdf

²http://www.achievethecore.org/downloads/E0702_Description_of_the_Common_Core_Shifts.pdf

³<http://www.parcconline.org/resources/educator-resources/model-content-frameworks/mathematics-model-content-framework>

	Grade 6	Grade 7	Grade 8	
1st TRIMESTER	M1: Ratios and Unit Rates (35 days)	M1: Ratios & Proportional Relationships (30 days)	M1: Integer Exponents and Scientific Notation (20 da ys)	
	M2: Arithmetic Operations Including Di vis ion of Fractions (25 days)	M2: Rational Numbers (30 days)	M2: The Concept of Congruence (25 days)	
			M3: Similarity (25 days)	
2nd TRIMESTER	M3: Rational Numbers (25 days)	M3: Expressions and Equations (35 days)	M4: Linear Equations (40 days)	
	M4: Expressions and Equations (45 days)	M4: Percent and Proportional Relationships (25 days)	M5: Examples of Functions from Geometry (15 da ys)	
		M5: Statistics and Probability (25 days)	M6: Linear Functions (20 days)	
3rd TRIMESTER	M5: Area, Surface Area, and Volume Problems (25 days)			
	M6: Statistics (25 days)	M6: Geometry (35 days)	M7: Introduction to Irrational Numbers Using Geometry (35 days)	

K y:					
Number	Geometry	Ratios and Proportions	Expressions and Equations	Statistics and Probability	Functions

*The columns indicating trimesters and quarters are provided to give you a rough guideline. Please use this additional column for your own pacing considerations based on the specific dates of your academic calendar.

Sequence of Grade 6 Modules Aligned with the Standards

Module 1: Ratios and Unit Rates

Module 2: Arithmetic Operations Including Division of Fractions

Module 3: Rational Numbers

Module 4: Expressions and Equations

Module 5: Area, Surface Area, and Volume Problems

Module 6: Statistics

Summary of Year

Grade 6 mathematics is about (1) connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems; (2) completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers; (3) writing, interpreting, and using expressions and equations; and (4) developing understanding of statistical thinking.

Key Areas of Focus for Grade 6: Ratios and proportional reasoning; early expressions and equations

Required Fluency: 6.NS.B.2 Multi-digit division
6.NS.B.3 Multi-digit decimal operations

Rationale for Module Sequence in Grade 6

In Module 1, students build on their prior work in measurement and in multiplication and division as they study the concepts and language of ratios and unit rates. They use proportional reasoning to solve problems. In particular, students solve ratio and rate problems using tape diagrams, tables of equivalent ratios, double number line diagrams, and equations. They plot pairs of values generated from a ratio or rate on the first quadrant of the coordinate plane.

Major Emphasis Clusters

Ratios and Proportional Relationships

- Understand ratio concepts and use ratio reasoning to solve problems.

The Number System

- Apply and extend previous understandings of multiplication and division to divide fractions by fractions.
- Apply and extend previous understandings of numbers to the system of rational numbers.

Expressions and Equations

- Apply and extend previous understandings of arithmetic to algebraic expressions.
- Reason about and solve one-variable equations and inequalities.
- Represent and analyze quantitative relationships between dependent and independent variables.

Students expand their understanding of the number system and build their fluency in arithmetic operations in Module 2. Students learned in Grade 5 to divide whole numbers by unit fractions and unit fractions by whole numbers. Now, they apply and extend their understanding of multiplication and division to divide fractions by fractions. The meaning of this operation is connected to real-world problems as students are asked to create and solve fraction division word problems. Students continue (from Grade 5) to build fluency with adding, subtracting, multiplying, and dividing multi-digit decimal numbers using the standard algorithms.

Major themes of Module 3 are to understand rational numbers as points on the number line and to extend previous understandings of numbers to the system of rational numbers, which now include negative numbers. Students extend coordinate axes to represent points in the plane with negative number coordinates and, as part of doing so, see that negative numbers can represent quantities in real-world contexts. They use the number line to order numbers and to understand the absolute value of a number. They begin to solve real-world and mathematical problems by graphing points in all four quadrants, a concept that continues throughout to be used into high school and beyond.

With their sense of number expanded to include negative numbers, in Module 4 students begin formal study of algebraic expressions and equations. Students learn equivalent expressions by continuously relating algebraic expressions back to arithmetic and the properties of arithmetic (commutative, associative, and distributive). They write, interpret, and use expressions and equations as they reason about and solve one-variable equations and inequalities and analyze quantitative relationships between two variables.

Module 5 is an opportunity to practice the material learned in Module 4 in the context of geometry; students apply their newly acquired capabilities with expressions and equations to solve for unknowns in area, surface area, and volume problems. They find the area of triangles and other two-dimensional figures and use the formulas to find the volumes of right rectangular prisms with fractional edge lengths. Students use negative numbers in coordinates as they draw lines and polygons in the coordinate plane. They also find the lengths of sides of figures, joining points with the same first coordinate or the same second coordinate, and apply these techniques to solve real-world and mathematical problems.

In Module 6, students develop an understanding of statistical variability and apply that understanding as they summarize, describe, and display distributions. In particular, careful attention is given to measures of center and variability.

Alignment Chart⁴

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 6 Modules
<p>Module 1: Ratios and Unit Rates (35 days)</p>	<p>Understand ratio concepts and use ratio reasoning to solve problems.</p> <p>6.RP.A.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. <i>For example, “The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak.” “For every vote candidate A received, candidate C received nearly three votes.”</i></p> <p>6.RP.A.2 Understand the concept of a unit rate a/b associated with a ratio $a:b$ with $b \neq 0$, and use rate language in the context of a ratio relationship. <i>For example, “This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $3/4$ cup of flour for each cup of sugar.” “We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger.”</i>⁵</p> <p>6.RP.A.3 Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.</p> <ol style="list-style-type: none"> Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios. Solve unit rate problems including those involving unit pricing and constant speed. <i>For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?</i> Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent. Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.

⁴When a cluster is referred to in this chart without a footnote, the cluster is taught in its entirety.

⁵Expectations for unit rates in this grade are limited to non-complex fractions.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 6 Modules
<p>Module 2: Arithmetic Operations Including Division of Fractions (25 days)</p>	<p>Apply and extend previous understandings of multiplication and division to divide fractions by fractions.</p> <p>6.NS.A.1 Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. <i>For example, create a story context for $(2/3) \div (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) \div (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$. (In general, $(a/b) \div (c/d) = ad/bc$.) How much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $3/4$-cup servings are in $2/3$ of a cup of yogurt? How wide is a rectangular strip of land with length $3/4$ mi and area $1/2$ square mi?</i></p> <p>Compute fluently with multi-digit numbers and find common factors and multiples.</p> <p>6.NS.B.2 Fluently divide multi-digit numbers using the standard algorithm.⁶</p> <p>6.NS.B.3 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.⁷</p> <p>6.NS.B.4 Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. <i>For example, express $36 + 8$ as $4(9 + 2)$.</i></p>
<p>Module 3: Rational Numbers (25 days)</p>	<p>Apply and extend previous understandings of numbers to the system of rational numbers.</p> <p>6.NS.C.5 Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.</p> <p>6.NS.C.6 Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane</p>

⁶This fluency standard begins in this module and is practiced throughout the remainder of the year.

⁷This fluency standard begins in this module and is practiced throughout the remainder of the year.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 6 Modules
	<p>with negative number coordinates.</p> <ol style="list-style-type: none"> Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., $-(-3) = 3$, and that 0 is its own opposite. Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane. <p>6.NS.C.7 Understand ordering and absolute value of rational numbers.</p> <ol style="list-style-type: none"> Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. <i>For example, interpret $-3 > -7$ as a statement that -3 is located to the right of -7 on a number line oriented from left to right.</i> Write, interpret, and explain statements of order for rational numbers in real-world contexts. <i>For example, write $-3^{\circ}\text{C} > -7^{\circ}\text{C}$ to express the fact that -3°C is warmer than -7°C.</i> Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. <i>For example, for an account balance of -30 dollars, write $-30 = 30$ to describe the size of the debt in dollars.</i> Distinguish comparisons of absolute value from statements about order. <i>For example, recognize that an account balance less than -30 dollars represents a debt greater than 30 dollars.</i> <p>6.NS.C.8 Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.</p>

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 6 Modules
<p>Module 4: Expressions and Equations (45 days)</p>	<p>Apply and extend previous understandings of arithmetic to algebraic expressions.⁸</p> <p>6.EE.A.1 Write and evaluate numerical expressions involving whole-number exponents.</p> <p>6.EE.A.2 Write, read, and evaluate expressions in which letters stand for numbers.</p> <p><i>a</i> Write expressions that record operations with numbers and with letters standing for numbers. <i>For example, express the calculation “Subtract y from 5” as $5 - y$.</i></p> <p><i>b</i> Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. <i>For example, describe the expression $2(8 + 7)$ as a product of two factors; view $(8 + 7)$ as both a single entity and a sum of two terms.</i></p> <p><i>c</i> Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). <i>For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$.</i></p> <p>6.EE.A.3 Apply the properties of operations to generate equivalent expressions. <i>For example, apply the distributive property to the expression $3(2 + x)$ to produce the equivalent expression $6 + 3x$; apply the distributive property to the expression $24x + 18y$ to produce the equivalent expression $6(4x + 3y)$; apply properties of operations to $y + y + y$ to produce the equivalent expression $3y$.</i></p> <p>6.EE.A.4 Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). <i>For example, the expressions $y + y + y$ and $3y$ are equivalent because they name the same number regardless of which number y stands for.</i></p>

⁸6.EE.A.2c is also taught in Module 4 in the context of geometry.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 6 Modules
	<p>Reason about and solve one-variable equations and inequalities.⁹</p> <p>6.EE.B.5 Understand solving an equation or inequality as a process of answering a question: Which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.</p> <p>6.EE.B.6 Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.</p> <p>6.EE.B.7 Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p, q, and x are all nonnegative rational numbers.</p> <p>6.EE.B.8 Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.</p> <p>Represent and analyze quantitative relationships between dependent and independent variables.</p> <p>6.EE.C.9 Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. <i>For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.</i></p>
<p>Module 5: Area, Surface Area, and Volume Problems (25 days)</p>	<p>Solve real-world and mathematical problems involving area, surface area, and volume.</p> <p>6.G.A.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.</p>

⁹Except for 6.EE.B.8, this cluster is also taught in Module 4 in the context of geometry.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 6 Modules
	<p>6.G.A.2 Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = l w h$ and $V = b h$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.</p> <p>6.G.A.3 Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.</p> <p>6.G.A.4 Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.</p>
<p>Module 6: Statistics (25 days)</p>	<p>Develop understanding of statistical variability.</p> <p>6.SP.A.1 Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. <i>For example, “How old am I?” is not a statistical question, but “How old are the students in my school?” is a statistical question because one anticipates variability in students’ ages.</i></p> <p>6.SP.A.2 Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.</p> <p>6.SP.A.3 Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.</p> <p>Summarize and describe distributions.</p> <p>6.SP.B.4 Display numerical data in plots on a number line, including dot plots, histograms, and box plots.</p> <p>6.SP.B.5 Summarize numerical data sets in relation to their context, such as by:</p> <ol style="list-style-type: none"> Reporting the number of observations.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 6 Modules
	<ul style="list-style-type: none">b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.

Sequence of Grade 7 Modules Aligned with the Standards

Module 1: Ratios and Proportional Relationships

Module 2: Rational Numbers

Module 3: Expressions and Equations

Module 4: Percent and Proportional Relationships

Module 5: Statistics and Probability

Module 6: Geometry

Summary of Year

Grade 7 mathematics is about (1) developing understanding of and applying proportional relationships; (2) developing understanding of operations with rational numbers and working with expressions and linear equations; (3) solving problems involving scale drawings and informal geometric constructions, and working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume; and (4) drawing inferences about populations based on samples.

Key Areas of Focus for Grade 7: Ratios and proportional reasoning; arithmetic of rational numbers

Rationale for Module Sequence in Grade 7

In Module 1, students build on their Grade 6 experiences with ratios, unit rates, and fraction division to analyze proportional relationships. They decide whether two quantities are in a proportional relationship, identify constants of proportionality, and represent the relationship by equations. These skills are then applied to real-world problems including scale drawings.

In Module 2 students continue to build on understanding of the number line.. They learn to add, subtract, multiply, and divide rational numbers. Module 2 includes rational numbers as they appear in expressions and equations—work that is continued in Module 3.

Major Emphasis Clusters

Ratios and Proportional Relationships

- Analyze proportional relationships and use them to solve real-world and mathematical problems.

The Number System

- Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

Expressions and Equations

- Use properties of operations to generate equivalent expressions.
- Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

Module 3 consolidates and expands students' previous work with generating equivalent expressions and solving equations. Students solve real-life and mathematical problems using numerical and algebraic expressions and equations. Their work with expressions and equations is applied to finding unknown angles and problems involving area, volume, and surface area.

Module 4 parallels Module 1's coverage of ratio and proportion but this time with a concentration on percent. Problems in this module include simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, and percent error. Additionally, this module includes percent problems about populations, which prepare students for probability models about populations covered in the next module.

In Module 5, students learn to draw inferences about populations based on random samples. Through the study of chance processes, students learn to develop, use, and evaluate probability models.

The year concludes with students drawing and constructing geometrical figures in Module 6. They also revisit unknown angle, area, volume, and surface area problems, which now include problems involving percentages of areas or volumes.

Alignment Chart¹⁰

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 7 Modules
<p>Module 1: Ratios and Proportional Relationships (30 days)</p>	<p>Analyze proportional relationships and use them to solve real-world and mathematical problems.¹¹</p> <p>7.RP.A.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. <i>For example, if a person walks $\frac{1}{2}$ mile in each $\frac{1}{4}$ hour, compute the unit rate as the complex fraction $\frac{1/2}{1/4}$ miles per hour, equivalently 2 miles per hour.</i></p> <p>7.RP.A.2 Recognize and represent proportional relationships between quantities.</p> <p>a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.</p>

¹⁰When a cluster is referred to in this chart without a footnote, the cluster is taught in its entirety.

¹¹Percent and proportional relationships are covered in Module 4.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 7 Modules
	<p>b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.</p> <p>c. Represent proportional relationships by equations. <i>For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as $t = pn$.</i></p> <p>d. Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate.</p> <p>7.RP.A.3 Use proportional relationships to solve multistep ratio and percent problems. <i>Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.</i></p> <p>Solve real-life and mathematical problems using numerical and algebraic expressions and equations.¹²</p> <p>7.EE.B.4¹³ Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.</p> <p>a. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. <i>For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?</i></p> <p>Draw, construct, and describe geometrical figures and describe the relationships between them.¹⁴</p> <p>7.G.A.1 Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.</p>

¹² The balance of this cluster is taught in Modules 2, 3, and 4.

¹³ In this module, the equations are derived from ratio problems. 7.EE.B.4a is returned to in Module 2 and Module 3.

¹⁴ 7.G.A.1 is also covered in Module 4. The balance of this cluster is taught in Module 6.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 7 Modules
<p>Module 2: Rational Numbers (30 days)</p>	<p>Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.</p> <p>7.NS.A.1 Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.</p> <ol style="list-style-type: none"> Describe situations in which opposite quantities combine to make 0. <i>For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.</i> Understand $p + q$ as the number located a distance q from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts. Apply properties of operations as strategies to add and subtract rational numbers. <p>7.NS.A.2 Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.</p> <ol style="list-style-type: none"> Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts. Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$. Interpret quotients of rational numbers by describing real-world contexts. Apply properties of operations as strategies to multiply and divide rational numbers.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 7 Modules
	<p>d. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.</p> <p>7.NS.A.3 Solve real-world and mathematical problems involving the four operations with rational numbers.¹⁵</p> <p>Use properties of operations to generate equivalent expressions.¹⁶</p> <p>7.EE.A.2¹⁷ Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. <i>For example, $a + 0.05a = 1.05a$ means that “increase by 5%” is the same as “multiply by 1.05.”</i></p> <p>Solve real-life and mathematical problems using numerical and algebraic expressions and equations.¹⁸</p> <p>7.EE.B.4¹⁹ Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.</p> <p>a. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. <i>For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?</i></p>
<p>Module 3: Expressions and Equations (35 days)</p>	<p>Use properties of operations to generate equivalent expressions.</p> <p>7.EE.A.1 Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.</p> <p>7.EE.A.2 Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. <i>For example, $a + 0.05a = 1.05a$ means</i></p>

¹⁵ Computations with rational numbers extend the rules for manipulating fractions to complex fractions.

¹⁶ The balance of this cluster is taught in Module 3.

¹⁷ In this module, this standard is applied to expressions with rational numbers in them.

¹⁸ The balance of this cluster is taught in Module 3.

¹⁹In this module the equations include negative rational numbers.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 7 Modules
	<p style="text-align: center;"><i>that “increase by 5%” is the same as “multiply by 1.05.”</i></p> <p>Solve real-life and mathematical problems using numerical and algebraic expressions and equations.</p> <p>7.EE.B.3²⁰ Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. <i>For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.</i></p> <p>7.EE.B.4 Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.</p> <p>a. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. <i>For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?</i></p> <p>b. Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. <i>For example: As a salesperson, you are paid \$50 per week plus \$3 per sale. This week you want your pay to be at least \$100. Write an inequality for the number of sales you need to make, and describe the solutions.</i></p>

²⁰Problems in this module take on any form but percent, which is included in Module 4.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 7 Modules
	<p>Solve real-life and mathematical problems involving angle measure, area, surface area, and volume. ²¹</p> <p>7.G.B.4 Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.</p> <p>7.G.B.5 Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.</p> <p>7.G.B.6 Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.</p>
<p>Module 4: Percent and Proportional Relationships²² (25 days)</p>	<p>Analyze proportional relationships and use them to solve real-world and mathematical problems.</p> <p>7.RP.A.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. <i>For example, if a person walks 1/2 mile in each 1/4 hour, compute the unit rate as the complex fraction $\frac{1/2}{1/4}$ miles per hour, equivalently 2 miles per hour.</i></p> <p>7.RP.A.2 Recognize and represent proportional relationships between quantities.</p> <ol style="list-style-type: none"> Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. Represent proportional relationships by equations. <i>For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as $t = pn$.</i>

²¹ Emphasis of 7.G.B.5 and 7.G.B.6 in this module is on solving equations. The standards are returned to in Module 6.

²² The emphasis in this module is on percent.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 7 Modules
	<p>d. Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate.</p> <p>7.RP.A.3 Use proportional relationships to solve multistep ratio and percent problems. <i>Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.</i></p> <p>Solve real-life and mathematical problems using numerical and algebraic expressions and equations.²³</p> <p>7.EE.B.3 Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. <i>For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.</i></p> <p>Draw, construct, and describe geometrical figures and describe the relationships between them.²⁴</p> <p>7.G.A.1 Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.</p>
<p>Module 5: Statistics and Probability (25 days)</p>	<p>Use random sampling to draw inferences about a population.</p> <p>7.SP.A.1 Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.</p>

²³ 7.EE.B.3 is introduced in Module 3. The balance of this cluster was taught in the first three modules.

²⁴ 7.G.A.1 is introduced in Module 1. The balance of this cluster is taught in Module 6.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 7 Modules
	<p>7.SP.A.2 Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. <i>For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.</i></p> <p>Draw informal comparative inferences about two populations.</p> <p>7.SP.B.3 Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. <i>For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.</i></p> <p>7.SP.B.4 Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. <i>For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.</i></p> <p>Investigate chance processes and develop, use, and evaluate probability models.</p> <p>7.SP.C.5 Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around $\frac{1}{2}$ indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.</p> <p>7.SP.C.6 Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. <i>For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.</i></p> <p>7.SP.C.7 Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.</p>

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 7 Modules
	<p>a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. <i>For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.</i></p> <p>b. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. <i>For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?</i></p> <p>7.SP.C.8 Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.</p> <p>a. Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs.</p> <p>b. Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., “rolling double sixes”), identify the outcomes in the sample space which compose the event.</p> <p>c. Design and use a simulation to generate frequencies for compound events. <i>For example, use random digits as a simulation tool to approximate the answer to the question: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood?</i></p>
<p>Module 6: Geometry (35 days)</p>	<p>Draw, construct, and describe geometrical figures and describe the relationships between them.²⁵</p> <p>7.G.A.2 Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.</p>

²⁵The balance of this cluster is taught in Modules 1 and 4.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 7 Modules
	<p>7.G.A.3 Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.</p> <p>Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.²⁶</p> <p>7.G.B.5 Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.</p> <p>7.G.B.6 Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.</p>

²⁶ 7.G.B.4 is taught in Module 3; 7.G.B.5 and 7.G.B.6 are introduced in Module 3.

Sequence of Grade 8 Modules Aligned with the Standards

Module 1: Integer Exponents and Scientific Notation

Module 2: The Concept of Congruence

Module 3: Similarity

Module 4: Linear Equations

Module 5: Examples of Functions from Geometry

Module 6: Linear Functions

Module 7: Introduction to Irrational Numbers Using Geometry

Summary of Year

Grade 8 mathematics is about (1) formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations; (2) grasping the concept of a function and using functions to describe quantitative relationships; (3) analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean theorem.

Key Area of Focus for Grade 8: Linear algebra

Rationale for Module Sequence in Grade 8

This year begins with students extending the properties of exponents to integer exponents in Module 1. They use the number line model to support their understanding of the rational numbers and the number system. The number system is revisited at the end of the year (in Module 7) to develop the *real* number line through a detailed study of irrational numbers.

Major Emphasis Clusters

Expressions and Equations

- Work with radicals and integer exponents.
- Understand the connections between proportional relationships, lines, and linear equations.
- Analyze and solve linear equations and pairs of simultaneous linear equations.

Functions

- Define, evaluate, and compare functions.

Geometry

- Understand congruence and similarity using physical models, transparencies, or geometry software.
- Understand and apply the Pythagorean theorem.

In Module 2, students study congruence by experimenting with rotations, reflections, and translations of geometrical figures. Their study of congruence culminates with an introduction to the Pythagorean theorem in which the teacher guides students through the “square-within-a-square” proof of the theorem. Students practice the theorem in real-world applications and mathematical problems throughout the year. (In Module 7, students learn to prove the Pythagorean theorem on their own and are assessed on that knowledge in that module.)

The experimental study of rotations, reflections, and translations in Module 2 prepares students for the more complex work of understanding the effects of dilations on geometrical figures in their study of similarity in Module 3. They use similar triangles to solve unknown angle, side length and area problems. Module 3 concludes with revisiting a proof of the Pythagorean theorem from the perspective of similar triangles.

In Module 4, students use similar triangles learned in Module 3 to explain why the slope of a line is well-defined. Students learn the connection between proportional relationships, lines, and linear equations as they develop ways to represent a line by different equations (e.g., $y = mx + b$, $y - y_1 = m(x - x_1)$). They analyze and solve linear equations and pairs of simultaneous linear equations. The equation of a line provides a natural transition into the idea of a function explored in the next two modules.

Students are introduced to functions in the context of linear equations and area/volume formulas in Module 5. They define, evaluate, and compare functions using equations of lines as a source of linear functions and area and volume formulas as a source of non-linear functions.

In Module 6, students return to linear functions in the context of statistics and probability as bivariate data provides support in the use of linear functions.

By Module 7, students have been using the Pythagorean theorem for several months. They are sufficiently prepared to learn and explain a proof of the theorem on their own. The Pythagorean theorem is also used to motivate a discussion of irrational square roots (irrational cube roots are introduced via volume of a sphere). Thus, as the year began with looking at the number system, so it concludes with students understanding irrational numbers and ways to represent them (radicals, non-repeating decimal expansions) on the real number line.

Alignment Chart²⁷

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 8 Modules
Module 1: Integer Exponents and Scientific Notation (20 days)	Work with radicals and integer exponents.²⁸ <p>8.EE.A.1 Know and apply the properties of integer exponents to generate equivalent numerical expressions. <i>For example, $3^2 \times 3^{-5} = 3^{-3} = 1/3^3 = 1/27$.</i></p> <p>8.EE.A.3 Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. <i>For example, estimate the population of the United States as 3×10^8 and the population of the world as 7×10^9, and determine that the world population is more than 20 times larger.</i></p> <p>8.EE.A.4 Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology.</p>
Module 2: The Concept of Congruence (25 days)	Understand congruence and similarity using physical models, transparencies, or geometry software.²⁹ <p>8.G.A.1 Verify experimentally the properties of rotations, reflections, and translations:</p> <ol style="list-style-type: none"> Lines are taken to lines, and line segments to line segments of the same length. Angles are taken to angles of the same measure. Parallel lines are taken to parallel lines. <p>8.G.A.2 Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.</p>

²⁷ When a cluster is referred to in this chart without a footnote, the cluster is taught in its entirety.

²⁸ 8.EE.A.2 is covered in Module 7.

²⁹ 8.G.A.3, 8.G.A.4, and the balance of 8.G.A.5 are taught in Module 3.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 8 Modules
	<p>8.G.A.5³⁰ Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. <i>For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.</i></p> <p>Understand and apply the Pythagorean Theorem.³¹</p> <p>8.G.B.6³² Explain a proof of the Pythagorean Theorem and its converse.</p> <p>8.G.B.7³³ Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.</p>
<p>Module 3: Similarity (25 days)</p>	<p>Understand congruence and similarity using physical models, transparencies, or geometry software.³⁴</p> <p>8.G.A.3 Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.</p> <p>8.G.A.4 Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.</p> <p>8.G.A.5 Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. <i>For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.</i></p>

³⁰ Congruence is addressed in this module. The balance of this standard (similarity) is taught in Module 3.

³¹ 8.G.B.6 and 8.G.B.7 are also taught in Module 3. The balance of 8.G.B.6 and 8.G.B.7 are covered in Module 7, along with standard 8.G.B.8.

³² The Pythagorean theorem is proved in this module guided by the teacher (square within a square proof). Students are not responsible for explaining a proof until Module 7.

³³ This standard is started in this module and practiced during the year. No solutions that involve irrational numbers are introduced until Module 7.

³⁴The balance of this cluster is taught in Module 1.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 8 Modules
	<p>Understand and apply the Pythagorean Theorem.³⁵</p> <p>8.G.B.6³⁶ Explain a proof of the Pythagorean Theorem and its converse.</p> <p>8.G.B.7³⁷ Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.</p>
<p>Module 4: Linear Equations (40 days)</p>	<p>Understand the connections between proportional relationships, lines, and linear equations.</p> <p>8.EE.B.5 Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. <i>For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.</i></p> <p>8.EE.B.6 Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b.</p> <p>Analyze and solve linear equations and pairs of simultaneous linear equations.</p> <p>8.EE.C.7 Solve linear equations in one variable.</p> <ol style="list-style-type: none"> Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers). Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.

³⁵ 8.G.B.6 and 8.G.B.7 are also taught in Module 2. The balance of standards 8.G.B.6 and 8.G.B.7 are covered in Module 7, along with standard 8.G.B.8.

³⁶ The Pythagorean theorem is proved in this module with guidance by the teacher (proof using similar triangles). Students are not responsible for explaining a proof until Module 7.

³⁷ This standard is started in this module and practiced during the year. No solutions that involve irrational numbers are introduced until Module 7.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 8 Modules
	<p>8.EE.C.8 Analyze and solve pairs of simultaneous linear equations.</p> <ol style="list-style-type: none"> Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously. Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. <i>For example, $3x + 2y = 5$ and $3x + 2y = 6$ have no solution because $3x + 2y$ cannot simultaneously be 5 and 6.</i> Solve real-world and mathematical problems leading to two linear equations in two variables. <i>For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.</i>
<p>Module 5: Examples of Functions from Geometry (15 days)</p>	<p>Define, evaluate, and compare functions.³⁸</p> <p>8.F.A.1 Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.³⁹</p> <p>8.F.A.2 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). <i>For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.</i></p> <p>8.F.A.3 Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. <i>For example, the function $A = s^2$ giving the area of a square as a function of its side length is not linear because its graph contains the points (1,1), (2,4) and (3,9), which are not on a straight line.</i></p>

³⁸ Linear and non-linear functions are compared in this module using linear equations and area/volume formulas as examples.

³⁹ Function notation is not required in Grade 8.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 8 Modules
	<p>Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.</p> <p>8.G.C.9⁴⁰ Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.</p>
<p>Module 6: Linear Functions (20 days)</p>	<p>Use functions to model relationships between quantities.</p> <p>8.F.B.4 Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.</p> <p>8.F.B.5 Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.</p> <p>Investigate patterns of association in bivariate data.⁴¹</p> <p>8.SP.A.1 Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.</p> <p>8.SP.A.2 Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.</p> <p>8.SP.A.3 Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. <i>For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.</i></p>

⁴⁰Solutions that introduce irrational numbers are not introduced until Module 7.

⁴¹8.SP standards are used as applications to the work done with 8.F standards.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 8 Modules
	<p>8.SP.A.4 Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. <i>For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?</i></p>
<p>Module 7: Introduction to Irrational Numbers Using Geometry (35 days)</p>	<p>Know that there are numbers that are not rational, and approximate them by rational numbers.</p> <p>8.NS.A.1 Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number.</p> <p>8.NS.A.2 Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π^2). <i>For example, by truncating the decimal expansion of $\sqrt{2}$, show that $\sqrt{2}$ is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.</i></p> <p>Work with radicals and integer exponents.⁴²</p> <p>8.EE.A.2 Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational.</p> <p>Understand and apply the Pythagorean Theorem.</p> <p>8.G.B.6 Explain a proof of the Pythagorean Theorem and its converse.</p> <p>8.G.B.7 Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.</p> <p>8.G.B.8 Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.</p>

⁴²The balance of this cluster is taught in Module 1.

Module and Approximate Number of Instructional Days	Standards Addressed in Grade 8 Modules
	<p>Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.</p> <p>8.G.C.9 Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.⁴³</p>

⁴³ Solutions that introduce irrational numbers are allowed in this module.

Eureka Math is available to the public free of charge, and is available [here](#). All units from K – 8 are the open source material formerly known as Engage NY. Academy of Dover classrooms have the full complement of manipulatives to accompany each unit.

Appendix 2 - Curriculum Documents :: Social Studies

Academy of Dover Charter School

Social Studies Overview

2021

Table of Contents:

<u>AOD Social Studies Scope & Sequence, K - 3</u>	<u>2</u>
<u>AOD Social Studies Scope & Sequence, 4 – 5</u>	<u>7</u>
<u>AOD Social Studies Scope & Sequence, 6 - 8</u>	<u>13</u>
<u>K – 3 Sample Assessment: Market Day</u>	<u>23</u>
<u>4 – 5 Sample Assessment: American Hero Book Report & Wax Museum</u>	<u>21</u>
<u>6 – 8 Sample Assessment: Emerald City</u>	<u>30</u>
<u>Social Studies Schedule</u>	<u>43</u>

At Academy of Dover Charter School, we strive to educate the whole child by providing a foundation of academics, athletics, and the arts. Our Social Studies Curriculum works within that framework. Students are provided opportunities to incorporate the standards and learning into real life experiences and readings.

Academy of Dover Charter School
Social Studies Scope and Sequence
Grades K-3

Grade	Delaware Social Studies Standard Alignment	Unit and Timeline	Essential Question(s)	Theme and Big Idea(s)
K	<p>Civics Anchor Standard Four: Students will develop and employ the civic skills necessary for effective, participatory citizenship.</p> <p>-K-3a: Students will demonstrate the skills necessary for participating in a group, including defining an objective, dividing, responsibilities and working cooperatively.</p>	<p>Year Long embedded curriculum</p> <p><i>Note: Teachers use daily behavior grades to track, monitor and assess student progress</i></p>	<p>Why is it important to work in a group?</p> <p>What words and actions are important when working in a group setting?</p>	<ul style="list-style-type: none"> • Playing with others • Cooperation • Teamwork • Working in a group to solve a problem • Kindness • Responsibilities
1	<p>Civics Anchor Standards One: Students will examine the structure and purpose of governments with specific emphasis on constitutional democracy.</p> <p>-K-3a: Students will understand that leaders are sometimes chosen by election, and that elected officials are expected to represent the interests of the people who elected them.</p> <p>-K-3b: Students will understand that positions of authority carry responsibilities and should be respected.</p>	<p>Unit 1: People Everywhere</p>	<p>What can we learn from our families, school, and communities?</p>	<ul style="list-style-type: none"> • Family • In your classroom • Leaders and Rules • Community • Moving to new homes
1	<p>Geography Anchor Standard One: Students will understand the nature and uses of maps, globes and other geo-graphics.</p> <p><i>-K-3a: Students will understand the nature and uses of maps, globes, and other geographic areas of the world.</i></p>	<p>Unit 2: Where we Live Unit 3: Maps</p>	<p>What do we know about Earth and the people living on it?</p> <p>What are the parts of a map?</p> <p>How can understanding a map help us solve problems?</p>	<ul style="list-style-type: none"> • Our Earth • Land and Water • Natural resources • Weather and seasons • City, town, suburb • Our country • Our country's neighbors • Identify a map • Map key • Compass Rose • Map routes
Grade	Delaware Social Studies Standard Alignment	Unit and Timeline	Essential Question(s)	Theme and Big Idea(s)

1	<p>History Anchor Standard Two: Students will gather, examine, and analyze historical data</p> <p><i>-K-3a: Students will use artifacts and documents to gather information about the past.</i></p>	Unit 4: Holidays Around the World	What winter holidays are celebrated by different cultures across the world?	<ul style="list-style-type: none"> • Hanukkah • Christmas • Kwanzaa • Las Posadas
1	<p>Economics Anchor Standard One: Students will analyze the potential costs and benefits of personal economic choices in a market economy.</p> <p><i>-K-3a: Students will understand that individuals and families with limited resources undertake a wide variety of activities to satisfy their wants.</i></p> <p><i>-K-3b: Students will apply the concept that economic choices require the balancing of costs incurred with benefits received.</i></p>	Unit 5: World of Work	What choices do people make to get the things they want?	<ul style="list-style-type: none"> • Needs and wants • Goods and services • Buy, trade, and save • All kinds of jobs • Getting food to market • Money (identify and tell value of penny, nickel, dime, quarter)
1	<p>History Anchor Standard One: Students will employ chronological concepts in analyzing historical phenomena.</p> <p><i>- K-3a: Students will use clocks, calendars, schedules, and written records to record or locate events in time.</i></p>	Unit 6: Everything Changes	How do people and things change over time?	<ul style="list-style-type: none"> • Learning about the past • The first Americans • Family life past and present • Going to school long ago • Moving people and things • Sharing news and ideas • Timeline project (done at home and presented in school) w/ oral presentation
1	<p>Civics Anchor Standard One: Students will examine the structure and purposes of governments with specific emphasis on constitutional democracy.</p> <p><i>- K-3b: Students will understand that positions of authority carry responsibilities and should be respected.</i></p>	Unit 7: Good Citizens	What do good citizens do?	<ul style="list-style-type: none"> • People need laws • Government and leaders • Citizens • Heroes in our country • Symbols of our country

Grade	Delaware Social Studies Standard Alignment	Unit and Timeline	Essential Question(s)	Theme and Big Idea(s)
2	<p>Civics Anchor Standard Two: Students will understand the principles and ideals underlying the American political system [Politics].</p> <p><i>-K-3a: Students will understand that respect for others, their opinions, and their property is a foundation of civil society in the United States.</i></p>	<p>Houghton Mifflin “Neighborhoods”</p> <p>Unit 1: People and Places</p>	<p>How do land and people make up community?</p>	<ul style="list-style-type: none"> • • • All Kinds of Groups • Living Together • Cities and Suburbs • Rural Communities
2	<p>History Anchor Standard Two: Students will gather, examine, and analyze historical data [Analysis].</p> <p><i>-K-3a: Students will use artifacts and documents to gather information about the past.</i></p> <p>History Anchor Standard Three: Students will interpret historical data.</p> <p><i>-K-3a: Students will understand that historical accounts are constructed by drawing logical inferences from artifacts and documents.</i></p>	<p>Houghton Mifflin “Neighborhoods”</p> <p>Unit 2: America’s Past</p>	<p>Why is the past important to you today?</p>	<ul style="list-style-type: none"> • First Americans • Explorers Travel The World • Jamestown and Plymouth • A New Country • Past heroes • Communities Change • Communication Changes
2	<p>Geography Anchor Standard Two: Students will develop knowledge of the ways humans modify and respond to the natural environment.</p> <p><i>-K-3a: Students will distinguish different types of climate and landforms and explain why they occur.</i></p>	<p>Houghton Mifflin “Neighborhoods”</p> <p>Unit 3: Places Near and Far</p>	<p>Why is the world around you important to your life?</p>	<ul style="list-style-type: none"> • • • Your Address • Land and Water • Weather and Climate • Regions • Resources

2	<p>History Anchor Standard Four: Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history.</p> <p><i>K-3a: Students will develop an understanding of the similarities between families now and in the past, including: -- Daily life today and in other times. -- Cultural origins of customs and beliefs around the world.</i></p>	<p>Houghton Mifflin “Neighborhoods”</p> <p>Unit 4: Ways Of Living</p>	<p>What are some of the cultures that make up your community, state and nation?</p>	<ul style="list-style-type: none"> • Families from Many Places • Sharing Cultures • America’s Symbols We Celebrate Holidays
---	--	---	---	--

Grade	Delaware Social Studies Standard Alignment	Unit and Timeline	Essential Question(s)	Theme and Big Idea(s)
3	<p>Civics Anchor Standard Three: Students will understand the responsibilities, rights, and privileges of United States citizens.</p> <p><i>-K-3a: Students will understand that American citizens have distinct rights, responsibilities, and privileges.</i></p>	<p>Delaware Recommended Curriculum</p> <p>Unit 1: Citizenship</p>	<p>What is the nature of a privilege?</p> <p>What do you have to do to earn or lose a privilege?</p> <p>What is the relationship between my rights and responsibilities?</p>	<ul style="list-style-type: none"> • Qualities of a good citizen Rights, responsibilities and privileges.
3	<p>Geography Anchor Standard One: Students will develop a personal geographic framework, or “mental map,” and understand the uses of maps and other geographics.</p> <p><i>-K-3a: Students will understand the nature and uses of maps, globes, and other geo-graphics.</i></p>	<p>Delaware Recommended Curriculum</p> <p>Unit 2: Maps and Globes</p>	<p>How do differences between flat maps and globes affect understanding of places in the world?</p> <p>Why are there different types of maps?</p> <p>How can they be “read” to discover the nature and contents of the real world?</p>	<ul style="list-style-type: none"> • Patterns • Spatial Thinking

3	<p>Geography Anchor Standard Three: Students will develop an understanding of the diversity of human culture and the unique nature of places.</p> <p><i>-K-3a: Students will identify types of human settlement, connections between settlements, and the types of activities found in each.</i></p> <p>Geography Anchor Standard Four: Students will develop an understanding of the character and use of regions and the connections between and among them.</p> <p><i>-K-3a: Students will be able to use the concepts of place and region to explain simple patterns of connections between and among places across the country and the world.</i></p>	<p>Delaware Recommended Curriculum</p> <p>Unit 3: Regions and Places</p>	<p>How are places different in culture and activity?</p> <p>How might connections between places affect their size and complexity?</p> <p>How do places differ from regions?</p> <p>How can regions be used to simplify an understanding of place diversity?</p> <p>How might differences and similarities among regions result in connections between them?</p>	<ul style="list-style-type: none"> • Patterns • Culture
3	<p>Economics Anchor Standard Two: Students will examine the interaction of individuals, families, communities, businesses, and governments in a market economy.</p> <p><i>K-3a: Students will understand how barter, money, and other media are employed to facilitate the exchange of resources, goods, and services.</i></p> <p>Economics Anchor Standard Three: Students will understand different types of economic systems and how they change.</p> <p><i>-K-3a: Students will identify human wants and the various resources and strategies which have been used to satisfy them over time.</i></p>	<p>Delaware Recommended Curriculum:</p> <p>Unit 4: Economics/Mini Society.</p>	<p>How might the use of money affect the economy?</p> <p>Why is what we use as money valuable?</p>	<ul style="list-style-type: none"> • Goods and Services • Producers and Consumers • Barter and Exchange • Functions of money • Characteristics of Money

4th Grade Scope & Sequence

Delaware Social Studies Standard Alignment	Unit & Timeline	Essential Questions	Big Ideas
<p>Civics</p> <p>Anchor Standard 1 4 – 5a 4 – 5b</p> <p>Anchor Standard 2 4 – 5b</p>	<p>Civics</p> <p>August - September</p>	<p>Why does government exist?</p> <p>How does our government function?</p> <p>How do the structures within our government function together?</p>	<ol style="list-style-type: none"> 1. Three Branches of Government: purpose, jobs, checks and balances <ol style="list-style-type: none"> a. Constitution-the law of the land 2. Variety of structures within the Government including local, state and national 3. Civic responsibilities and civility 4. Demographic Groups and how they function both formally and informally
<p>Economics</p> <p>Anchor Standard 3 4 – 5a</p>	<p>Economics</p> <p>October</p>	<p>How can different means of production and distribution change over time?</p> <p>What impact do those changes have on our communities?</p>	<ol style="list-style-type: none"> 1. Variety of production, distribution and exchange used within economic systems <ol style="list-style-type: none"> a. Different times and places 2. Economic Vocabulary Budget 3. Plan practice
<p>Geography</p> <p>Anchor Standard 1 4 – 5a</p> <p>Anchor Standard 3 4 – 5a</p>	<p>Geography</p> <p>November – February</p>	<p>How do we fit into our world?</p>	<ol style="list-style-type: none"> 1. Cardinal and Intermediate directions 2. Map Characteristics: grid system, keys, types of maps 3. Map of Delaware: three counties, major bodies of water, major cities, physical features: Landmarks and landforms, first settlements 4. United States Regions: Northeast, Southeast, Midwest, Southwest and West <ol style="list-style-type: none"> a. States, landmarks, landforms, bodies of water and major characteristics both physical and historical (what are they known for?) 5. Practice reading large maps, finding various routes that fit certain characteristics. 6. Geographical skills and knowledge to develop profiles for areas based on region, climate and physical features.

<p>History</p> <p>Anchor Standard 1 4 – 5a</p> <p>Anchor Standard 2 4 – 5b</p> <p>Anchor Standard 4 4 – 5a 4 – 5b</p>	<p>History</p> <p>March – June</p>	<p>Who are the American People?</p> <p>How does Delaware history connect to U.S. history?</p> <p>What caused these events? What effects can be traced through time back to these events?</p>	<ol style="list-style-type: none"> 1. Study historical events and people within a given time frame to determine cause and effect: timelines, articles, books, etc. 2. Examine historical materials relating to regions, society or theme and place events in chronological order and analyze changes over time. 3. Delaware History (settlements, production, agriculture, famous Delawareans) <ol style="list-style-type: none"> a. Caesar Rodney b. Lenape Indians c. William Penn d. Eluthere Irene DuPont 4. Native American settlements prior to European settlements 5. European Explorers and settlements 1609-1775: Hudson, Cartier, Columbus, Cabot and Juan Ponce de Leon 6. French and Indian War 1754-1763 7. King George III: Treatment of Colonist, taxes, expansion of settlements <ol style="list-style-type: none"> a. Parliament b. Sugar Tax, tea tax c. Quartering Act d. Stamp Act e. Townsend Act required colonists to pay taxes on shipped goods such as tea f. Proclamation of 1763 prohibiting settlements beyond Appalachian Mountains g. Boston Tea Party 8. Revolutionary War 1775-1783 (War of Independence from Britain) <ol style="list-style-type: none"> a. Thirteen Colonies b. First Continental Congress in 1774 to make a list of complaints c. Timelines d. Major Battles e. Patriots vs Loyalists (Red Coats) f. Development of the first state g. Constitution 9. American People <ol style="list-style-type: none"> a. Demographics, immigration and changes in technology overtime
---	------------------------------------	--	---

5th Grade Scope & Sequence

Delaware Social Studies Standard Alignment	Unit & Timeline	Essential Questions	Big Ideas
<p>Economics</p> <p>Anchor Standard 1 4 – 5a 4 -5b</p> <p>Anchor Standard 2 4 – 5a</p>	<p>Economics</p> <p>August - October</p>	<p>How does supply and demand impact communities and countries?</p> <p>How are goods and services exchanged?</p> <p>In what way does international trade impact the United States?</p>	<ol style="list-style-type: none"> 1. Understanding the role of banks and other financial institutions in the economy. 2. Understand that prices in a market are based on supply and demand. 3. Consumers and producers in a market economy make economic choices based on supply and demand. 4. International trade links countries around the world; improving the economic welfare of nations.
<p>Civics</p> <p>Anchor Standard 2 4 – 5a</p> <p>Anchor Standard 3 4 – 5a</p>	<p>Civics</p> <p>November – December</p>	<p>Why does government exist?</p> <p>How does our government function?</p> <p>How do a variety of structures within our government function together?</p>	<ol style="list-style-type: none"> 1. Fundamental Rights-Bill of Rights 2. Principle of Due Process. (Execute and enforce laws). 3. Selecting effective leaders; being informed about candidates and issues of the day.
<p>History</p> <p>Anchor Standard 2 4 – 5b</p> <p>Anchor Standard 3 4 – 5a</p> <p>Anchor Standard 3 4 – 5a</p> <p>Anchor Standard 4 4 – 5a 4 – 5b</p>	<p>History</p> <p>January – April</p>	<p>Who are the American People?</p> <p>Why do historical accounts of the same event differ?</p> <p>What conclusions can be drawn from primary and secondary sources?</p> <p>How has Delaware changed since the 1940s?</p>	<ol style="list-style-type: none"> 1. Explain why historical accounts of the same event sometimes differ and relate this explanation to the evidence presented/point-of-view of the author. 2. Draw historical conclusions and construct historical accounts from primary and secondary accounts. 3. Development of the first state to the Civil War (1776-1865). 4. Growth of Commerce, industry transportation and agriculture (1865-1945). 5. Modern Delaware (1945-present). 6. Students will develop an understanding of selected themes in the United States History: demographics, immigration. 7. How has technology changed our world?

<p>Geography</p> <p>Anchor Standard 1 4 – 5a</p> <p>Anchor Standard 3 4 – 5a</p>	<p>Geography</p> <p>May – June</p>	<p>How are societal changes and the physical environment linked?</p> <p>How can the current locations of human activities be understood through geography?</p>	<ol style="list-style-type: none"> 1. Apply knowledge of topography, climate and vegetation of Delaware and United States and how society changes and is affected the physical environment. 2. Students will understand the reasons for the locations of human activities and settlements and the routes connecting them in Delaware and in the United States.
--	------------------------------------	--	--

6th Grade Scope and Sequence

Standards	Trimester	Unit	Essential Questions
<p>Civics 1A: Students will understand why governments have the authority to make, enforce, and interpret laws and regulations, such as levying taxes, conducting foreign policy, and providing for national defense.</p>	1	Civics: Different Governments	<p>Why does a government have certain powers?</p> <p>What are the similarities and differences between different types of government?</p>
<p>History 4B: Students will develop an understanding of ancient and medieval world history, and the continuing influence of major civilizations</p>	1	History/Civics: Different Governments	<p>Why does a government have certain powers?</p> <p>What are the similarities and differences between different types of government?</p>
<p>History 1A: Students will examine historical materials relating to a particular region, society, or theme; analyze change over time, and make logical inferences concerning cause and effect.</p> <p>History 4B: Students will develop an understanding of ancient and medieval world history, and the continuing influence of major civilizations.</p>	1-2	History: Ancient Civilizations	<p>How can thinking like a historian help us draw credible conclusions?</p> <p>What are the similarities and differences between different ancient civilizations? How have certain places changed over time?</p>

<p>Geography 2A: Students will apply knowledge of the major processes shaping natural environments to understand how different peoples have changed and been affected by, physical environments in the world's sub-regions.</p> <p>Geography 3A: Students will analyze patterns of cultural activity associated with different world regions in order to explain the reasons for the cultural development of a place.</p> <p>Geography 4A: Students will understand the processes affecting the location of economic activities in different world regions.</p>	2	Geography: Culture and Civilization	<p>What makes a place culturally unique?</p> <p>What is culture? Why is it important to understand culture What makes ancient civilizations culturally unique?</p> <p>Under what conditions do cultures spread?</p> <p>To what extent did ancient civilizations influence culture of other places?</p>
<p>Geography 1A: Students will demonstrate mental maps of the world and its sub-regions which include the relative location and characteristics of major physical features, political divisions, and human settlements.</p>	2-3	Geography: Building Global Mental Maps	<p>What are mental maps?</p> <p>How can mental maps be created and used effectively?</p> <p>Why do maps have distortions?</p> <p>How have cartographers minimized distortions?</p>
<p>Economics 3A: Students will demonstrate the ways in which the means of production, distribution, and exchange in different economic systems have a relationship to cultural values, resources, and technologies.</p>	3	Economic Systems	<p>How are decisions about the production and distribution of goods and services dependent upon the cultural values, availability and quality of resources and the intent and use of technology?</p> <p>How does a society's economic system impact its standard of living?</p>

Trimester	Unit	Descriptions	Week of:	Lesson:	Social Studies Standards
1	How Geographers Look at the World	Geography is the study of the earth's physical features and the living things that inhabit the planet. Geographers use many tools and methods to study and understand the world's places. By investigating the relationships among human activities, the earth's physical systems, and the environment, the study of geography can contribute to a better future for the world's people.	Week 1	Introduction & Autobiographical Map	Geography Anchor Standard One 6-8a Geography Anchor Standard Two 6-8a
			Week 2	Vocabulary Determining location Hemispheres	
			Week 3	Latitude & Longitude Coordinates	
			Week 4	Maps vs. Globes, Reading Maps	
			Week 5	5 Themes of Geography	
			Week 6	Review & Assessment	
	Green Cities	Students will be able to use observation, analysis of graphics and photos, and other geographic skills to identify physical and human aspects of a site and ply information about human preferences to planning for a settlement.	Week 7	Lesson One: The Face of a Place	Geography Anchor Standard Three 6-8a CCSS.ELA. Literacy.RH.6-8.1 CCSS.ELA. Literacy.RH.6-8.4
			Week 8	Lesson Two: Patterns & Plans for American Cities	
			Week 9	Lesson Three: Green Ideas Change City Designs	
			Week 10	Lesson Four: Greens Cities - Today & Tomorrow	
			Week 11	Transfer Task: Emerald City	
Why Trade	Students will be able to evaluate the impact of government trade policies have on foreign and domestic consumers, producers, and resource owners, explain how and why people trade, analyze costs and benefits of trade.	Week 12-13	Lesson One: Why People Trade	Economics Standard Four 6-8a	
		Week 14	Lesson Two: Trade Connection		
		Week 15	Lesson Three: Specialization		
		Week 16-17	Lesson Four: Trade Barriers		
2			Week 18	Microeconomics: Market Economy & Price	Economics Standard One 6-8a

			Week 19	Review & Assessment	Economics Standard Four 6-8a & Economics Standard One 6-8a
3	Project Citizen	Students will be able to identify public policy issues in their community, implement research strategies to effectively gather information on a particular public policy issue, act responsibly with the interests of the larger community in mind.	Week 20	Lesson One: Public Policy	Civics Standard Four 6-8a
			Week 21	Lesson Two: Communicating with Office Holders	
			Week 22	Lesson Three: Solutions to Public Policy Problems	
	Expansion of Freedom	Students will be able to... <ul style="list-style-type: none"> Identify the protections awarded to minorities by the Constitution. Analyze the individual protections in the Bill of Rights. Construct support for the necessity of protecting individual rights. 	Week 23	Lesson One: Majority Rule and Minority Rights	Civics Standard Two 6-8a CCSS. ELA-Literacy.6-8.1 CCSS. ELA-Literacy.6-8.2 CCSS. ELA-Literacy.6-8.3
			Week 24	Lesson Two: Constitutional Protections	
			Week 25	Lesson Two: Supreme Court Cases and Case Studies	
			Week 26	Lesson Three: Limiting Individual Rights	
			Week 27	Review & Assessment	
			Week 28	Civil Rights and Political Freedom	
	Partnerships & Partitions	Students will be able to suggest borders or regional boundaries that will minimize conflict and identify or predict the likely result of a proposed border or boundary change.	Week 29	Lesson One: Drawing Borders	Geography Standard Four 6-8b
Week 30			Lesson Two: Conflict and Cooperation in Czechoslovakia		
Week 31			Lesson Three: Conflict and Cooperation in the Middle East		
Week 32			Transfer Task		
Week 33			Review & Assessment		

	Early Civilizations	Students will develop an understanding of ancient and medieval world history, and the continuing influence of major civilizations, including: -- The beginnings of human society -- Early civilizations and pastoral peoples (4,000- 1,000 BC) -- Classical traditions, major religions, and great empires (1,000 BC--300 AD)	Week 34	The Beginnings of Human Society	History Standard Two 6-8a History Standard Two 6-8b
	Week 35	The Fertile Crescent			
Week 36 & 37	Ancient Egypt & Nubia				

Academy of Dover Charter School Sample Assessment:
Social Studies, K – 3

Grade:	Standard Alignment:	Role:
3	Economics Anchor Standards 2 and 3	Mini-Society Creator, Prototype Designer, Producer, Business Owner, Salesperson
K – 2	Economics Anchor Standards 1 and 2	Consumer

Project Description

Third grade students will create a mini-society in their classrooms. They will culminate their learning experience in a “Market Day” where student “Business Owners”, hold a market that allows other students in the school to exchange money for goods or services.

Leading up to Market Day, third grade students will apply for a business license, design a classroom currency, explore the concept of scarcity, analyze the impacts of human wants and needs on a market economy, and study the interconnectivity of consumers, producers, services, money, resources, and goods.

On Market Day, third grade students will demonstrate understanding of barter, money, and other media and how they are employed to facilitate the exchange of resources, goods, and services. Kindergarten, first, and second grade students will attend the Market Day in order to analyze the potential costs and benefits of personal economic choices in a market economy. Project Timeline

Approx. Date	Milestone
4/15	Mini-Society Packets explained to students and parent letter sent home to third grade parents (See attached). Notifications of Market Day date sent to K – 2 teachers.
4/22	Business choice and parent notification slips due (third grade)
4/30	Business choices finalized (third grade)
5/8	Prototypes due (third grade)
5/12	Business license due (third grade)
5/29	Market Day (Kindergarten – third grade)

Project Parent Letter (3rd Grade)

Dear Parents,

The third grade will begin a unit in Social Studies learning about the aspects of community that involve economic concepts such as resources, scarcity, opportunity costs, products, goods, business, interdependence, and money (saving/spending). We will establish a Mini-Society in our room and we will be using a form of money designed by the children. The children will earn this money in the classroom.

As the students work in their society, they will establish rules to live by and each child will establish some sort of “business” to operate during the school day. They must make a product to sell (made by the student). Production costs for the item your child markets should not exceed \$15. Please ensure that your child has at least twenty of the same items to sell. The parents may NOT set up, clean up, or run the business for their child. Please remember that this is a learning experience for the children. It is their responsibility to take full charge of their own business and money.

If you have any questions about your child’s Mini-Society, please contact us. You will find a calendar of events attached to this letter that will help you remember deadlines along with a list of ideas for businesses that your child might like to consider. Please assist your child with completing the form and return it to school no later than April 22nd. To avoid duplication, we will notify your child of product approval on April 30th. Your child is required to bring in a prototype (sample) of the product on May 8th. Thank you for your help in making this a worthwhile learning experience for your child.

Sincerely,

The 3rd Grade Teachers

I have seen this Mini-Society letter.

Child’s Name: _____

Parent’s Signature: _____

AOD Market Day Suggested Businesses

Goods

- Art
- Bookmarks
- Puppets
- Pillows
- Painted rocks/shells
- Jewelry
- Woodworking
- Plants
- Greeting Cards
- Banks – jars, milk cartons, etc.
- Doll Clothes
- Personalized stationary
- Books/stories
- Sewn pictures, animals, bean bags
- Buttons or badges
- Gift bags
- Hair clips, barrettes
- Joke book
- Refrigerator magnets – clothespins
- Coloring book
- Sand paintings
- Paper flowers
- Games

There will be NO drinks or food items allowed. No prepackaged or repackaged store bought items will be sold. Only items produced by the child will be sold on Market Day. Production costs for the item your child markets should not exceed \$15. Please ensure that your child has at least twenty of the same items to sell. The parents may NOT set up, clean up, or run the business for their child.

Please return this form by April 22nd

Child's Name: _____

Write your top three product choices for production in our Mini-Society. You will be notified by April 30th as to which product you will be producing.

Choice 1 _____

Choice 2 _____

Choice 3 _____

Mini Society News

Parents, Teachers, Friends

PLEASE COME TO THE THIRD GRADE MARKET DAY!

When: Friday, May 18th

Where: Market Day will be held in the gymnasium.

Time: 1:00 – 2:30

1:00 – 1:30: 4th & 5th grade

1:30 – 2:00: 2nd grade & Upper School

2:00 – 2:30: K-1st grade

As the date approaches, please take time to notice the advertisements that will be posted around the school of what goods will be sold by our third grade businesses.

Bring real money. Every \$0.50 (real money) will equal \$1.00 Mini Society money. A banker will be available at the entrance to exchange real money for Mini Society money.

Thank you for your support!!!!

Market Day Project Rubric

Name: _____

Date: _____

Business Name: _____

Product Created: _____

Requirement	10 Points	8 Points	6 Points	4 Points
Quantity: Did you make 20 of your product?	Student had all 20 products complete.	Student had 15 – 19 products complete.	Student had 11 – 14 products complete.	Student had 10 or less products complete.
Timeliness: Did you make your prototype by the due date? Did you finish making your products by Market Day?	Student met all due date deadlines and used their class time productively without reminders.	Student missed 1 deadline and /or was given a few reminders about being productive in class.	Student missed most deadlines and/or needed multiple reminders about being productive in class.	Student did not meet any of the deadlines and/or was consistently off task during production time in class.
Creativity: Was your product unique and helpful to others?	Product was very creative and was helpful to others.	Product showed some creativity and/or was useful for others.	Product could have been more creative and/or could have served a more useful purpose.	Product did not demonstrate any creativity in design, nor did it serve as a helpful tool.
Quality of Product/Service: Was your product neat, durable, and eye-catching? If it is a service, would others want to come back again?	The product was neat, durable, and attractive to the eye or the service was beneficial enough for repeat customers.	The product showed some neatness, durability, & attractiveness or the service had some customers that would visit again.	The product was lacking in neatness, durability, & attractiveness or the service didn't have a lot of supporters.	The product needed a lot of work to improve neatness, durability, & attractiveness or the service needed a different approach.
Professionalism: Did you take your business seriously during Market Day?	Student maintained a high level of professionalism throughout Market Day.	Student maintained an average level of professionalism throughout Market Day.	Student maintained a below average level of professionalism throughout Market Day.	Student maintained an unacceptable level of professionalism throughout Market Day.
Total	_____ /50			

Grade: _____

Comments:

5th Grade Assessment: Wax Museum

The Wax Museum is a cross-curricular hands-on project designed to allow students to showcase their learning across multiple genres. Students use primary source material to research an American Hero, write a research paper, design, rehearse, and present an oral presentation, and participate in a ‘Wax Museum’.

The 5th grade students dress up as their character and act as the statue in the museum. Students from lower grades press the button to bring the statue to life, and the 5th grade presents their material to their audience, recreating the experience of an automated wax statue.

The 4th grade students use the opportunity as a formative assessment for ELA. They listen to three statues of their choice, take notes, and return to the classroom for a debrief. This serves to focus their learning, and also creates excitement as they look forward to their turn as a statue.

Standards for the Wax Museum Assessment:

Grade	Standard Alignment	Role
K – 4	History Anchor Standard 3	Museum Patrons
4	ELA Speaking & Listening 4.2, 4.3	Museum Patrons
5	History Anchor Standard 4	Wax Museum Statue, Researcher
5	ELA Speaking & Listening 5.5, 5.6	Wax Museum Statue, Researcher
5	ELA Writing, 5.2, 5.4, 5.7, 5.10	Researcher, Author

Grade 5

The 5th Grade Wax Museum project is an annual project that allows Academy of Dover Charter School 5th grade students to showcase their learning across multiple genres.



The title 'American Hero Book Report' is displayed in a large, bold, black font with a white, starry or speckled texture. The words are arranged in three lines: 'American' on the top line, 'Hero' in the middle, and 'Book Report' on the bottom line. The letters are slightly irregular and have a hand-drawn or stamped appearance. The background is white with a faint, light gray grid pattern.

The following packet is VERY IMPORTANT and contains all requirements for both Mrs. Still and Mrs. Basquez research report paper and wax museum, poster, and presentations. This research project is a joint *collaboration* for your child’s writing and social studies classes.

Please read thoroughly and sign and return the bottom portion on the next page.

IMPORTANT NEED TO KNOW:

Research Paper: DUE to Friday, May 20

Museum Poster: DUE to Thursday, May 27

Wax Museum: Save the Date: Wednesday, May 30, 2:00 in the AOD gymnasium.

All poster work is to be done at home.

*Research and rough draft of research paper and historical figure will be done in social studies and writing class.

*Typed final draft is to be done at home or in technology.

*Each student needs a biography book on their hero, most students were able to get one at AOD; if not please take them to the local library.

*Students will need costume/props; check your local Dollar Tree, Goodwill, etc. If you have any questions or concerns, please contact Ms. Still or Mrs. Basquez.

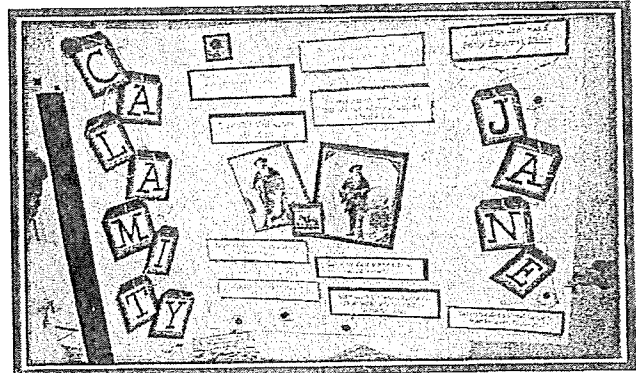
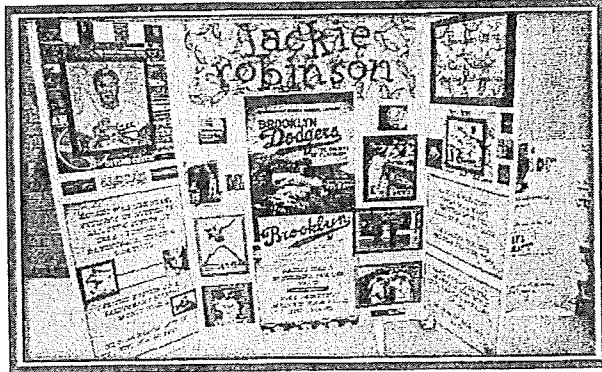
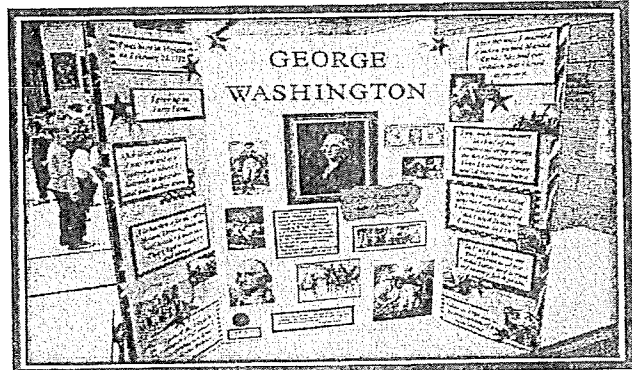
Posters due: **May 26th**

A good poster will:

- Reflect your hero! Be creative and colorful. Include a nice header.
- Be neat! Type all information or write it neatly in your **very best handwriting**.
- Include all **10 facts** and other important information.
- Showcase relevant pictures of your hero – as many as possible!

• Examples of Great Looking Posters!

• Note that each poster is neat, attractive, and informative.



Wax Museum Tips

Some fun extras:

Bring some props to hold or set out on your desk that reflect your hero's accomplishments.

Name: _____

Wax Museum Rubric

	3	4	5	Score:
Poster				
Creativity	The poster is adequate. It needs more color and more pictures to make it stand out.	The poster is well done, but is missing something to make it special.	The poster looks amazing! It is colorful, has great pictures, and has an overall "wow-factor"!	
Information	The poster is lacking necessary information and does not include all 10 facts.	The poster has 10 facts, however they are all basic and do not include important information.	The poster is full of interesting and thoughtful information, with all 10 facts!	
Neatness	The poster is messy and does not look carefully made.	The poster is okay, but the handwriting is messy or the pictures are not neatly presented.	The poster is beautifully done. It is neat and all information is easily read. It has been made with pride.	
Presentation				
Information	Less than 10 facts were included in the presentation.	10 facts were included, but were basic and did not include important information.	Student recited all 10 facts. They were meaningful and thought provoking.	
Expression	Student sounded monotone.	Student had some expression.	Student presented with excitement and interest.	
Overall Presentation	Student had no eye contact and did not sound prepared.	Student presentation was okay. Eye contact was there, but inconsistent.	Student delivered a wonderful presentation. They had good eye contact and showed enthusiasm.	
Wax Museum				
Costume	Student did not wear anything special for the Wax Museum.	Student had a costume, but it did not represent the hero.	The costume fit the hero. It is evident that the student tried to dress as their hero.	
Behavior	Student did not manage their behavior and required multiple reminders to behave in character.	Students had a hard time remaining professional at times. They had one reminder to behave in character.	Student had excellent behavior and remained in character. No warning were given.	
Comments				Total Score:

Wax Museum Research Paper Guidelines

Page 1: Title Page – Cover Page

- American Hero name
- Portrait of American Hero
- Border on paper
- Your name
- Class
- Date

Page 2: Childhood/Early Life (5-7 sentences)

- General basic information
- Parent's information
- When and where they were born
- Where they went to school

Page 3: Accomplishments/Achievements/Contributions (10-15 sentences)

- Why is this American hero famous?
- How did this American hero affect American history?
- Did they receive any awards or what milestones did they have?
- College education
- Occupation — what did they do for work?

Page 4: Remembrance/Reflection (Bullet Points)

- Include 3 facts
- Include 2 quotes
- Death/Living

Page 5: Bibliography (Citations)

- List at least 3 sources
- APA Format
- Citationmachine.net

Format

- Bold subtitles
- 12 point font
- Double Spaced
- Organized into paragraphs
- Times New Roman or Arial font

Reading Log

Reading Log is to be handed in
completed and signed by
parent/guardian

American Hero Wax Museum Research Project:

Name: _____

Score: /20

Criteria	3 Points	2 Points	1 Points	0 Points	Score
Cover Page	Cover page includes a portrait, border, name, class and date.	Cover page is missing one component.	Cover page is missing two or more components.	No cover page.	
Biography	Paragraph clearly details a short biography of the person's life. It includes 3 or more supporting details and/or examples.	Paragraph details a short biography of the person's life. It provides 1-2 supporting details and/or examples.	Paragraph gives very little information about the person's life. No details and/or examples are given.	No biography about the person is researched.	_____
Contributions	Paragraph clearly relates to contributions made by the person. It includes several supporting details and/or examples.	Paragraph relates to contributions made by the person. It provides 1-2 supporting details and/or examples	Paragraph gives very little information about the contributions made. No details and/or examples are given.	No contributions about the person are researched.	
Remembrance/ Reflection (Bullet Points)	Paragraph clearly relates to why the person is an American Hero. It includes several supporting details and/or examples.	Paragraph relates to why the person is an American hero. It provides 1 2 supporting details and/or examples.	Paragraph relates to why the person is an American hero. No details and/or examples are given.	No information about why the person is an American hero is stated.	_____
Bibliography	Bibliography contains at least 3 sources correctly formatted.	Bibliography is missing one component.	Bibliography is missing two components.	A bibliography was not included.	

Format / Conventions	Paper is double spaced, 12-font, and organized in paragraphs. No grammatical or spelling errors.	Paper is missing one component.1 2 grammatical or spelling errors.	Paper is missing two or more components.3-4 grammatical or spelling errors.	Paper is not in correct format. More than 5 grammatical or spelling errors.	_____
Reading Log	x	Reading Log is completed with signatures.	Reading Log is missing one or two components.	Reading Log is not turned in.	_____

AOD 6 – 8 Assessment Sample:
7th Grade Assessment

Emerald City – Planning a Sustainable City Project

Transfer Task

This summative assessment is a transfer task that requires students to use knowledge and understandings to perform a task in a new setting or context.

The assessment and scoring guide should be reviewed with students prior to any instruction. Students should do the assessment after the lessons conclude.

Essential Question measured by the transfer task:

- What physical and human features make a place culturally unique?

Prior Knowledge	In this unit you have examined the idea of place. You have learned to identify important human and physical features of a site. You have learned how the geographic situation affects the lives of people in the place. You know that culture affects the way people build and change their neighborhoods, towns and cities.
Problem/Role	You are a city planner (<u>see Appendix 1</u>). Your company would like to get the job of planning a modern city called “Emerald City.” Your job will be to help prepare a plan for the new city that will meet the needs of the residents. If your plan is selected, your company will continue to work on this project until the city is finished. Four sites for the residents to choose from have been selected (<u>Appendix 3</u>).

<p>Perspective</p>	<p>The 50,000 people who will be living and working in Emerald City are committed to living a “green” way of life. They value technology as a way of making their life more convenient and reducing their impact on the environment. Emerald City residents like to spend a lot of time outdoors. They enjoy beautiful scenery and green space where they can exercise and gather for social and sports events.</p> <p>Here are their requests:</p> <ol style="list-style-type: none"> 1. The city should look and feel modern and tech-friendly. 2. The city should have clean, unpolluted air. 3. Most energy should come from wind power, hydroelectric power, or solar power. 4. There should be plenty of room for outdoor activities and sports.
<p>Product</p>	<p>You will prepare a presentation for the bid opening. Each team will get only 3 minutes to explain their plan. Work together to make the most of the time allowed persuading the Emerald City Planner Search Committee that you have the best plan.</p> <p>Use <u>Appendix 2</u> to evaluations of the geographic site, situation, and cultural needs and perspectives of the residents.</p>
<p>Criteria for an Exemplary Response</p>	<p>To be judged excellent, your oral presentation will:</p> <ol style="list-style-type: none"> 1. Include a clear concise description or “vision” of Emerald City, the place of the future. 2. Explain how you have selected the best spot for the city from the four choices offered. 3. Explain how your design accomplishes the goals of the new residents.

[Click here for a Student Rubric.](#)

[Click here for a Teacher Rubric.](#)

Working as a City Planner

What does a city planner do?

City planners help design cities. Guided by the needs and wants of the residents, a city planner decides some important things about the city. For example, he or she might plan how tall the buildings should be, how wide the streets should be, and the street pattern. Even the number of street signs, and the designs bus stops, lampposts and trash cans go into the plan for the city. Every building must be designed with careful thought. How will people get power and water? How can homes and apartments be located close to public transportation? Aesthetic design, or how things look, is something else the planner must think about. The designer wants the city to be a place where people feel comfortable. To make sure the plan is practical and also pleasing to the people who will live there, a city planner must be creative.



How does a city planner get the job done?

The planner begins by surveying the possible physical sites to select the right one. Then he studies the people who will live and work there. Demographic, economic, and environmental studies must be completed to assess the needs of the community. The planner also asks people for their opinions. When all the information is gathered, a planner creates maps and designs. People can look at these general plans and suggest changes. Then the city planner works with architects to plan for the construction of bridges, radio and telephone towers, and other infrastructure such as roads.

Adapted Text - <http://www.princetonreview.com/Careers.aspx?cid=162>



Congratulations, you have graduated from college! You have started your first job as a city planner. Your company would like to get the job of planning a modern city called “Emerald City.” You will work with a team to put together a proposal for the new city. The exact location of the Emerald City has not been decided.

Your job will be to complete four steps:

- ✦ Complete the site evaluation.
- ✦ Select a good location for the city.

- ✦ Do a preliminary city plan complete with a drawing.
- ✦ Present your plan to the Search Committee.

I am a City Planner

Read the background information about your new job. Complete the graphic organizer below.

My Responsibilities	My Thoughts

View the sites that are now open for development. Notice that there are four possible sites for your city. Look carefully at the site map and read the description for each one.

Green Cities
Transfer Task

Select one of the sites for your city and answer the questions below.

- Evaluate the physical features on the site map. What features make this site unique?
- List the physical features of the site you have chosen. What are the advantages/disadvantages of each physical feature when planning your city?

PHYSICAL FEATURES	ADVANTAGES	DISADVANTAGES

Choose 5 -10 human features that are essential for the development of a successful city.

- Explain why you chose this location.
- What was important when choosing this location?
- How was the environment modified by your choice?

HUMAN FEATURES	WHY DID YOU CHOOSE THIS LOCATION?	WHAT WAS AN IMPORTANT FACTOR YOU CONSIDERED WHEN CHOOSING THIS LOCATION?	HOW WAS THE ENVIRONMENT CHANGED OR AFFECTED BY THIS CHOICE?

Create your city plan by using the information provided and your rubric.

Green Cities
 Transfer Task
 Appendix 2 - Evaluating Site and Situation

Use this form to evaluate each of the four land parcels that are possible building sites for Emerald City. You will need to use a separate form for each parcel.

Parcel #	Physical Characteristics	Can be used "as is"	Must be changed	Problems or Notes
	Land and soil conditions			
	Climate			
	Natural resources			
	Outdoor space and Scenery			

Student reflection:

Which parcel would be your personal choice for a place to live? Explain your answer.

35 Evaluating the Human Characteristics of the Site

Now read below the information you have been given about the people who want to move to Emerald City.

The 50,000 people who will be living and working in Emerald City are committed to living a “green” way of life. They value technology as a way of making their life more convenient and reducing their impact on the environment. Emerald City residents like to spend a lot of time outdoors. They enjoy beautiful scenery and green space where they can exercise and gather for social and sports events.

Here are their requests:

- The city should look and feel modern and up-to-date.
- The city should have clean, unpolluted air.
- Most energy should come from wind power, hydroelectric power, or solar power.
- There should be plenty of room for outdoor activities and sports.

Use the graphic organizer below to evaluate the human characteristics of the site. Some facts have been added for you to get you started.

HUMAN FEATURES	Facts from the reading	What facilities should be included?	Research needed
Facts about the people	50,000 residents	Homes for 50,000 people	What age groups will be the largest?
Cultural values of the people			
Activities of the people			

Green Cities
Transfer Task
Appendix 2 - Evaluating Site and Situation

The **geographic situation** of Emerald City will be important, too. As a planner you should know three facts.

- On the other side of the mountains is a large desert. Few people live there.
- There are six coastal cities to the north, or to the right, of Land Parcel 4. All of these cities are factory towns with lumber mills and refineries.
- The winds in this area usually blow from west to east.

How might these facts affect your choice of the best spot for Emerald City? Explain your answer with an example.

Now that you have completed your evaluation of the physical and human aspects of the **geographic site**, and you have also considered the **geographic situation**, it is time to make a decision where to build the city and begin the preliminary plan.

I choose Land Parcel _____.

Part II - Planning Emerald City

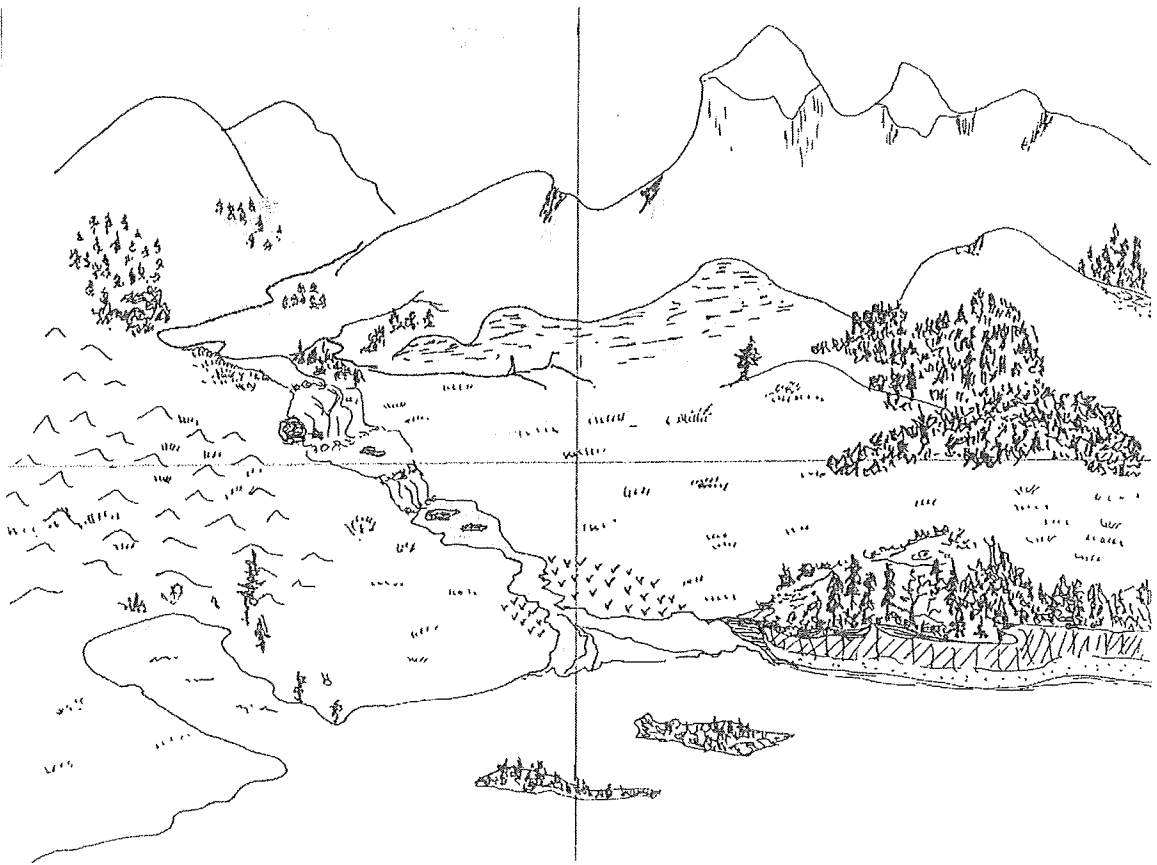
Use the sketch of the land parcel you selected, your physical and human site evaluations, and your thoughts about the geographic situation to plan Emerald City.

Combine all your ideas in a map or graphic. Be sure to label the important features.

Remember you will be presenting your ideas to the search committee. While you may spend many hours working on the plan, you will have only three minutes to get your ideas across.

Site 1

Site 2



Site 3

Site 4

Green Cities
Transfer Task Potential Sites
Appendix 1

Site 1

This mountain valley will be the perfect place for your new city. Residents can escape the summer heat and will enjoy the beautiful mountain landscape. Rivers and a waterfall might be put to work to make electricity, and sportsmen will enjoy fishing and hunting. Flooding in the valleys and lowlands can be a problem occasionally, especially after storms and in the spring when the snow melts in the mountains.

Elevation: 700-1800 ft

Average Temperatures:

Summer 55°-80° F

Winter 20°-50° F

- Soils: Rocky with erosion along streams
- Land features: Steep hillsides with a narrow river valley and a flat area at the base of the hills with good cropland
- Water features: Three fast-moving rivers come together before a waterfall. Stream flows are heavy after storms and in spring when snow melts in the hills.
- Vegetation: Heavily forested at lower elevations and a natural meadow near the streams
- Animal life: Abundant fish, deer and other small game

Green Cities
Transfer Task
Appendix 2 - Evaluating Site and Situation

Site 2

If you choose this site, your city will be high above all the rest. The scenery is beautiful, and the mountain climate makes skiing and other winter sports possible. Hunting is also a possibility. The benefits of this area will be worth the expense of building roads and transporting building materials. In the mountains, mineral deposits have already been discovered - including silver and lead - and there may be more!

Elevation: 1000-5000 ft.

Average Temperatures:

Summer 30°-74° F

Winter 10°-35° F

- Soils: Rocky, including granite and shale. Deposits of coal, small deposits of silver and lead.
- Water features: A few small mountain streams
- Vegetation: Heavily forested at lower elevations,
- Animal life: Deer, elk, bears and other game animals; a few sightings of mountain lions in recent years.

Site 3

Stay connected with the rest of the world by building a harbor city on this site. Residents will enjoy the mild climate in winter. Building and water travel in this area will be easy. It will be easy to plan around the fact that low-lying coastal areas can sometimes experience damage from wind, rain and storm surges from coastal storms.

Elevation: Sea level - 700 ft

Average Temperatures:

Summer 55°-85° F

Winter 28°-65° F

- Soils: Clay deposits and sandy soils with rocky base
- Land features: Low hills with some flat meadowland in eastern portion. Marshy area near the coast.
- Water features: River with small islands. Tide lands at mouth of river. Deep water harbor.
- Vegetation: Hardwood trees and shrubs. Marsh grass in low areas.
- Animal life: Some small animals, fresh water fish in rivers, saltwater fish along coast.

Site 4

Residents will enjoy the options created by the varied environments. Offshore islands, beautiful wooded areas and natural meadows contrast with the marshland. Perched on the cliffs, your city will be protected from coastal storms. Mosquitoes will only be a passing summer problem.

Elevation: Sea level – 1000 ft

Average Temperatures:

Summer 55°-85° F

Winter 28°-63° F

- Soils: Sandy soils with clay in marshy areas
- Land features: Mostly flat coastal plain with gentle hills in the interior. Erosion has caused a steep cliff along part of the coastline. Two small islands off shore.
- Water features: No rivers. Shallow water between coast and islands.
- Vegetation: Woodland covers about half the land area and both islands. Marshy land near the river. Some natural meadow.
- Animal life: Muskrats in the marsh. Deer, rabbits and small game.

Green Cities
Transfer Task
Student Rubric

Scoring Category This exhibit provides evidence that ...	Score Point 3	Score Point 2	Score Point 1
I can read maps, charts and geography texts to get the information I need. <ul style="list-style-type: none"> • Maps, Charts, Text 	I can read geographic sources to get information.	I can read two kinds of geographic sources to find information.	I can read one geographic source to find information.
I can identify natural features of a site and tell how people could use them OR how people might have to change them in order to live in a place.	I can identify at least two natural features and their effects on the lives of people in a place.	I can identify one natural feature and its effects on the lives of people in a place.	I can identify at least one natural feature but cannot relate it to effects on the lives of people.
I can identify human or cultural characteristics of a site and explain how they affect a landscape.	I can identify at least two human or cultural characteristics and explain how they affect the landscape of the place.	I can identify at least one human or cultural characteristic and explain how it affect the landscape of the place.	I can identify at least one human or cultural characteristics but cannot explain its effect on the landscape of the place.
I can identify ways the geographic situation of a place (its location in relation to other places) might affect the lives of people in a place.	I can identify two ways the geographic situation of a place might affect the lives of people in a place.	I can identify one way the geographic situation of a place might affect the lives of people in a place.	I cannot identify or explain how the geographic situation of a place might affect the lives of people in a place.
I understand and apply geographic terms and concepts related to places. <ul style="list-style-type: none"> • Site, Landscape, Physical and Human Characteristics, Situation, Environment 	I always use geographic terms and concepts correctly.	I sometimes use geographic terms and concepts correctly.	I misused or left out two or more of the key terms or geographic concepts.
I represented geographic ideas and information about place through graphics.	I used map elements (TODAL) and mapping tools to construct a map or graphic to represent my ideas. Included clear labels and a legend or key.	I used labels and map elements and tools to construct a map, although some are left out or unclear.	I used a map or graphic to represent ideas, but most key elements are missing or used incorrectly.
I included specific features in my city design to match physical and human characteristics of the site.	I included 3 specific features in my city (buildings or facilities) designed to match physical and human characteristics of the site.	I included 2 specific features in my city design to match physical and human characteristics of the site.	I included at least one specific feature in my city design to match physical and human characteristics of the site.

Green Cities
 Transfer Task
 Teacher Rubric

Scoring Category This exhibit provides evidence that the student ...	Score Point 5	Score Point 3	Score Point 1
Uses geographic sources to extract information relevant to the question or problem.	Extracts relevant information from a variety of geographic sources. (maps, journals, text, charts and other geo-graphics)	Extracts relevant information from two or more geographic sources.	Extracts relevant information from only one geographic source.
Identifies natural features of a site and ways people might use or modify them in order to live in a place.	Identifies at least two natural features of a site and ways people might use or modify them in order to live in a place.	Identifies one natural feature of a site and ways people might use or modify it in order to live in a place.	Identifies natural features of a site but cannot clearly explain how people might use or modify them in order to live in a place.
Identifies human or cultural characteristics of a site and explains how they affect a landscape.	Identifies at least two human or cultural characteristics of a site and explains how they affect a landscape.	Identifies at least one human or cultural characteristics of a site and explains how they affect a landscape.	Identifies human or cultural characteristics of a site but cannot clearly and consistently relate them to landscape features.
Identifies ways the geographic situation of a place (its location in relation to other places) might affect the lives of people in a place.	Identifies two ways the lives of people in a place might be affected by its geographic situation.	Identifies one way the lives of people in a place might be affected by its geographic situation.	Cannot identify or explain how the lives of people in a place might be affected by its geographic situation
Understands and applies geographic terms and concepts related to <i>place</i> (Site, landscape, Physical and human characteristics, situation)	Geographic terms and concepts are accurately and consistently used and applied throughout the presentation.	Geographic terms and principles are generally used with success, but use and application are inconsistent.	Two or more key terms or geographic principles are omitted or applied incorrectly.
Geographic ideas and information are represented through graphics.	Uses appropriate techniques and tools to construct a map or appropriate graphic to represent ideas including legend or key.	Uses some techniques and tools to construct a map or appropriate graphic to represent ideas, but some elements are unclear or undefined.	Attempts to construct a map or appropriate graphic to represent ideas, but some key elements are missing or incorrectly applied.

<p>Exhibit relates the requirements of physical and human characteristics of the site and the geographic situation to a plan for a city.</p>	<p>City plan includes at least three facilities or buildings that clearly relate to the physical characteristics of the site and/or human or cultural aspects of the site.</p>	<p>City plan includes at least two facilities or buildings that clearly relate to the physical characteristics of the site and/or human or cultural aspects of the site.</p>	<p>City plan includes at least one facility or buildings that clearly relate to the physical characteristics of the site and/or human or cultural aspects of the site.</p>
--	--	--	--

AOD Social Studies Schedule

Grade	Schedule
K	Kindergarten standard of citizenship are woven into developmental play stations, classroom cohesion units, and individual regulation. Lessons occur daily.
1 - 3	Forty-five minutes are designated for Social Studies or Science daily. Classes rotate between social studies and science as required by the specific unit.
4 – 5	Forty-five minutes are designated for Social Studies daily.
6	60 minutes are designated for Social Studies daily.
7 – 8	Each class receives a 60-minute block of Social Studies daily.

Appendix 2 - Curriculum Documents :: Science

Academy of Dover Science Curriculum Overview 2020 - 2021

Table of Contents:

Academy of Dover & Delaware Science Coalition MOA	<u>2</u>
Scope & Sequence K – 8	<u>3</u>
Science & Engineering Practices and Crosscutting Concepts	<u>12</u>
Sample Lesson Kindergarten	<u>13</u>
Sample Lesson 4 th Grade	<u>15</u>
Sample Lesson 6 th Grade	<u>17</u>
Curriculum Documents, PD plan and HQIM evidence	<u>19</u>

Academy of Dover
Scope & Sequence, K – 8

*Sequence may change if the Coalition requires

Tri- mes ter	Unit Topic (Using Coalition Kits)	Performance Expectations	Unit Phenomenon	Sample Student Activities & Assessments
Kindergarten				
1	Trees (FOSS)	K-LS1-1 K-PS3-1	How are the leaves of trees the same and different?	Campus Walk Art collaboration (leaves) Science journal
2	Push, Pull, Go	K-PS2-1 K-PS2-2	What happens when we push an object on strings? What happens when we use different strengths and directions of pushes and pulls on the motion of an object? The harder we push a toy car, the further it goes.	Investigate the swing-set. Explore a sand garden to see what happens to the sand. Push a toy car to a line that is close and a line that is far away. Bumper cars! Push, Pull, Go Unit. Science Journal
3	Weather & Me (STC)	K-ESS2-1 K-ESS3-2	Why do sunflowers follow the sun? What happens to a snowman on a warm day? Why? What are some differences between clouds? What is the weather like today, and how is it different from yesterday?	Snowman in weather (in winter). Campus walk to observe sunflowers (in June). Cloud watching discussion (class activity). Science Journal

Tri- mes ter	Unit Topic (Using Coalition Kits)	Performance Expectations	<u>Unit Phenomenon</u>	Sample Student Activities & Assessments
First Grade				
1, 2, 3	Bright Days/Dark Nights – NGSS	1-ESS1-1 1-ESS1-2	<u>What is the shadow illusion?</u> Describe seasonal patterns of sunrise and sunset. What can we predict using those observations?	Science Journals: Students create and carry out an investigation on the position of the sun. This long term project leads them to make predictions. Included leading questions: Can we log the length of the day on the same day each month? Can we compare the patterns of daylight in Delaware to those in Alaska? How? What do we notice? What conclusions can we draw? Summative assessment.
2	Solids & Liquids	2-PS1-1 2-PS1-2	What properties do solids and liquids have? How can we classify them? What can testing tell us about these properties that our senses do not?	Students observe/test/sort a set of 20 solids based on physical properties. Students define the properties. Students observe/test/sort liquids. Students design and complete a race to order liquids from most viscous to most fluid. Student Journals. Summative assessment.
3	Organisms (STC)	K-LS1-1 1-LS3-1	What happens to a seed when we plant it? How can we define the life of an organism?	Students plan and conduct an investigation to observe and draw conclusions on the growth of a plant. Students build terrariums and aquariums and observe the plants and creatures within. What details and labels are required to make our scientific drawings useful and meaningful?
3	Catching the Wind (EiE)	K-2ETS1-1 K-2ETS1-2 K-ETS1-3 K-ETS2-1	<u>Why does the wind blow?</u> How can we use the wind to solve problems?	Students use the engineering design process to plan, create, test, and improve a model of a sail that will move a boat across strings with the air of a fan. Students use the engineering design process to design, build a windmill that lifts the most weight.

Tri- mes ter	Unit Topic (Using Coalition Kits)	Performance Expectations	<u>Unit Phenomenon</u>	Sample Student Activities & Assessments
Second Grade				
1	Insects (STC)	3-LS1-1 3-LS3-2	What patterns can be observed in the changes a butterfly goes through during their life?	DE-EOU-GR3 (Environmental Impacts on Organisms and Life Cycles and Traits) as a class activity. Science Journals. Plan and Carryout an investigation that observes the life cycle of a butterfly.
2	Bridges	2-PS1-2 2-PS1-3 K-2ETS1-1 K-2ETS2-1	What impact does the choice of materials have on a structure?	Students use the engineering design process to plan, design and build a model bridge. Discuss merits and properties of building materials. Design and carryout a test for the bridge. Summative reflection.
3	Soils (FOSS)	2-ESS1-1 2-ESS2-1 2-ESS2-2	What kind of events cause changes in the earth?	Students use the engineering design process to plan, design and build a model to slow or prevent water from changing the shape of the land.
3	Plants (no kit)	S-LS4-1 S-LS2-1	How does the weather change the health of a plant?	Plant a class garden. Design an investigation to answer questions on watering and sunlight/shade.

Tri- mes ter	Unit Topic (Using Coalition Kits)	Performance Expectations	<u>Unit Phenomenon</u>	Sample Student Activities & Assessments
Third Grade				
1	Forces & Interactions (no kit) <i>Anticipated for 2021</i>	3-PS2-1 3-PS2-2 3-PS2-3 3-PS2-4 3-5ETS1-1,2,3	Magnets produce fields that attract or repel other objects.	Students use the engineering design process to design, test, and improve a tabletop maglev transportation system.
2	Earth Materials (FOSS)	3-LS4-1 4-ESS1-1	Did an asteroid kill the dinosaurs?	Students investigate through taking apart and putting together Students observe, describe, and record properties of rocks Students observe the effects of vinegar on certain minerals Students investigate and classify fossils
3	Water, Water Everywhere (EiE)	3-5ETS1-1 3-5ETS1-2 3-5ETS1-3 3ESS2-1	Dirty water must be cleaned before it is safe to drink.	Students use the engineering design process to investigate, plan, and test water filters.

Tri- mes ter	Unit Topic (Using Coalition Kits)	Performance Expectations	<u>Unit Phenomenon</u>	Sample Student Activities Assessment
Fourth Grade				
1	Structures of Life (FOSS)	3-LS1-1 3-LS2-1 3-LS3-1 3-LS4-1 3-LS4-2 3-LS4-3 3-LS4-4	Hemingway's Polydactyl Cats	Students investigate and sort animals by characteristics Investigate the external structures of a beetle to analyze the impacts of those structures on its status as predator and/or prey Students classify animals by their young Investigate and compare properties of seeds and fruits Investigate crayfish to observe and record structural and behavioral adaptations Investigate skeletal systems. Hydroponics vs soil: an Investigation
2	Magnetism & Electricity (FOSS)	4PS3-1 4PS3-2 4PS3-3 4PS3-4 4ESS3-1	Shuffling your feet on some floors can build up a static charge.	Design an experiment to identify conductors and insulators Discover the relationship between the number of turns of wire around an electromagnetic core and the strength of the magnetism Explore to discover attraction and repulsion with relationship to magnets Use the engineering design process to design and create a telegraph
3	Land & Water	4-ESS1-1 4-ESS2-1 4-ESS2-2 4-ESS3-1 4ESS3-2	Grand Canyon	DE EOU (Processes that Shape the Earth) in small groups Students look for evidence of patterns and systems in motion, weathering, fossils, and rock formations. Evidence of patterns and systems in streams as they encounter Earth features. Water on Earth: Investigate how water travels through sand, clay, dirt, and mud.

Tri- mes ter	Unit Topic (Using Coalition Kits)	Performance Expectations	<u>Unit Phenomenon</u>	Sample Student Activities & Assessments
Fifth Grade				
1	Engineering Design Process	MS-ETS1-4	Testing a design can be helpful. Galoping Gertie Bridge Disaster	Students use the engineering design process to design and test a model airplane, including a prototype and redesign. Science Journal
1	Matter	5-PS1-1 5-PS1-2 5-PS1-3 5-PS1-3 5-PS2-1 5-PS3-1	Why does cutting an onion make you cry? Observe a balloon with baking soda combined with a water bottle filled with vinegar – what happens?	DE-EOU (Structures and Properties of Matter) in small groups Heating & Cooling petroleum Plan the best ways to carry out an experiment that separates mixtures. Science Journal
2	Astronomy	5-ESS1-1 5-ESS1-2 5-ESS2-1	Observe the winter and summer solstice How do Sundials work?	DE-EOU (Stars and the Solar System) in small groups Design and build a sun dial Design an investigation to measure shadows on campus throughout the day. Earth vs The Sun: a size comparison! Science Journal.
3	Ecosystems	5-LS2-1	Watered once in 50 year?	Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment. Create and observe an ecosystem and investigate the roles of producers, consumers, and decomposers. Science Journal
3	Slick Solutions (EiE) new to AOD in2020	5-LS2-1 5-ESS3-1 3-5ETS -1 3-5ETS-2	The salvinia effect in plants	Students use the engineering design process to design a model clean-up of an oil spill. Science Journal

Tri- mes ter	Unit Topic (Using Coalition Kits)	Performance Expectations	Unit Phenomenon	Sample Student Activities Assessment
Sixth Grade				
1	Planet Earth (TCI) & Space (TCI)	MS-ESS-1 MS-ESS-2 MS-ESS-3 MS-ESS-4	How do sundials work? What are star trails and what can we connections can we make by observing them? How much does the earth weigh?	Students design a model to explain rotation and revolution. They record their model in a short video as a formative assignment. Explore the motion of orbiting objects in the solar system. TCI Summative assessments.
2	Earth's History & Systems (no kit)	ME-ESS2-1 MS-ESS2-4 MS-ESS3-1	What happens as water changes state? What can we tell by observing rocks? Water entering the Geosphere.	Topographical map manipulation. Exploration of Natural Disasters through student selected research. Use the engineering design process to explore solutions to weathering and erosion. Where did the Water Go? (new in 2020)
3	Forces (TCI)	MS-PS2-1 MS-PS2-2 MS-PS2-4 MS-PS3-1 MS-PS3-5	Rube Goldberg Machines	DE-EOU (Force & Motion) in small groups Use the engineering design process to plan, build, and present a Rube Goldberg Machine.

Tri- mes ter	Unit Topic (Using Coalition Kits)	Performance Expectations	Unit Phenomenon	Sample Student Activities Assessment
Seventh Grade				
1	Matter (TCI)	MS-PS1-1 MS-PS1-2 MS-PS1-3 MS-PS1-4 MS-PS1-5	To create stage makeup, chemists must account for the properties of the substances they will use. Water appears to disappear when boiled. Why doesn't it break?	DE-EOU (Properties of Matter) in small groups for part, with part as a summative assessment. Students use the engineering design process to plan and design investigations chemical reactions, and make sense of information to describe the impacts of synthetic materials. Students use different tools to model simple molecules and more complex extended structures. Students identify unknown substances found at a fictional crime scene. Students predict state changes as a result of pressure and temperature changes. Students discover how the motion of particles is related to the thermal energy of a substance and the heat it gains or loses from other substances. They use this discovery to revise their initial models of matter.
1 & 2	Cells, Genetics, & Heredity	MS-LS1-1 MS-LS1-2 MS-LS1-3 MS-LS3-1 MS-LS3-2	Why do cats have different hair color and length? Killer T-Cells White blood cells Inner Life of a Cell	Antibiotic Resistance History of Life on Earth The Evolution of Life Human Impacts on Evolution Students design and create a model of a cell from edible material How has the opposable thumb affected human survival? Students plan a Trait Trek to Madagascar.

3	Adaptations	MS-LS4-1 MS-LS4-2 MS-LS4-3 MS-LS4-4 MS-LS4-5 MS-LS4-6	Similar fossils have been found in the same aged rock in fossil digs that are over 100 miles apart. Natural Fish Lure	Students assume the role of paleontologist and collect data from one of six fossil sites around the world. They will analyze the data to find patterns. Students use the engineering design process to design a tool to extract a plaster model of a fossil, develop possibly solutions to problems they encounter, and evaluate their designs. Students construct a scientific explanation based on evidence obtained from sources. Look who's coming to Dinner: students formulate a hypothesis, test data, and
---	-------------	--	--	---

Trimester	Unit Topic (Using Coalition Kits)	Performance Expectations	Unit Phenomenon	Sample Student Activities & Assessment
Eighth Grade				
1	Transformation of Energy & Waves (TCI)	MS-PS3-1,2,3 MS-PS4-1 MS-PS4-2 MS-ETS1-1 MS-ETS1-3	Ruben's Tube Self-leveling pool table	DE-EOU (Transformation of Energy) as a summative assessment. Ocean Waves (crosscurricular with Math) Forces & Non-contact forces How does the mass and speed of a go-kart affect the forces involved in collision? Use a slinky to model a wave and create a plan for erosion.
2	Weather & Climate (TCI)	MS-ESS2-6	Build a Mountain to increase rainfall Dark Snow Project	DE-EOU (Weather and Climate) as a summative assessment. Four Cities
3	Ecosystems: Interactions, Energy, and Dynamics (TCI)	MS-LS1-6,7 MS-LS2-1,2,3,4,5	Attack of the killer fungi Too much of a good thing?	Resources in Ecosystems Energy & Matter in Ecosystems Humans & Changing Ecosystems

Science & Engineering Practices and Crosscutting Concepts

		Science & Engineering Practices								
		Asking Questions & Defining Problems	Developing & Using Models	Planning & Carrying Out Investigations	Analyzing & Interpreting Data	Using Mathematics & computational thinking	Constructing Explanations & Designing Solutions	Engaging in Argument from Evidence	Obtaining, Evaluation, and Communicating Information	
Crosscutting Concepts	Patterns	K – 8	K – 8	K – 8	K – 8	K – 8	K – 8	K – 8	K – 8	All domains
	Cause & Effect	K – 8	K – 8	K – 8	K – 8	K – 8	K – 8	K – 8	K – 8	
	Scale, Proportion, & Quantity	K – 8	K – 8	K – 8	K – 8	K – 8	K – 8	K – 8	K – 8	
	Systems & System Models	K – 8	K – 8	K – 8	K – 8	K – 8	K – 8	K – 8	K – 8	
	Energy & Matter	K – 8	K – 8	K – 8	K – 8	K – 8	K – 8	K – 8	K – 8	
	Structure & Function	K – 8	K – 8	K – 8	K – 8	K – 8	K – 8	K – 8	K – 8	
	Stability & Change	K – 8	K – 8	K – 8	K – 8	K – 8	K – 8	K – 8	K – 8	

As Academy of Dover continues to embrace the Next Generation Science Performance Expectations, each team will utilize PLC time on a monthly basis to address the Practices and Crosscutting Concepts above. Given a blank chart during PD week, we will fill in the chart as we progress through the year, noting the practices and concepts that we are exploring with our students. The goal for each grade-band team to address each block over the course of the schoolyear.

Academy of Dover

Sample Kindergarten Lesson

Adapted from Push, Pull, Go!

Standards:	Phenomenon:	Crosscutting concepts:	Disciplinary Core Ideas:	Science & Engineering Practices:
Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.	What happens when we use different strengths and directions of pushes and pulls on the motion of an object?	Cause & Effect	PS2.A: Forces & Motion PS2.B: Types of interactions PS3.C: Relationship between Energy and Forces	Asking questions and defining problems. Planning & Carrying out Investigations. Analyzing & Interpreting Data. Constructing explanations.
Lesson Specific Objective: Use common playground equipment to continue building understanding of force and motion. This 45 minute lesson occurs on Day 2 of this unit. This unit takes approximately 2 weeks.				Essential Question: What makes the ball go? How can we make a plan to figure out a scientific answer?

Push, Pull, Roll Extension

Vocabulary: Push, pull, force, motion

Materials: Different playground balls, Anchor Chart labeled “Our Ideas about Force” and “Our Ideas about Motion”, Student Science Journals.

*This lesson takes place partially outside.

Kindergarten Activity Plan

Engage (5 minutes): Class begins outside with students seated. Teacher rolls a ball against a backdrop and challenges the students to use their new vocabulary words to discuss their observations through turn and talk. What do we notice? What would we wonder?
Explore (10 minutes): Teachers will pose 3 questions. (Can any of these playground balls move on their own? What can make them move? How can I make one move without touching it with any part of my body?) Students plan how to use the playground balls to answer those three questions. Teacher notes plan on Anchor Chart. Explore: (15 minutes): Students investigate in their groups. Teachers may utilize collaborative group roles or partner roles. Teacher circulates to facilitate with sharing, on-task activity, and questioning.
Sample Questions to further thinking: How is what stopped the ball a force? What can change the direction of the ball? How is what changed the direction of the ball a force? What is the same about the red ball and the green ball as we roll them? Why did the red ball go farther when Student A rolled it? You said you rolled the yellow ball harder (used more force), but it didn't go as far as the blue one. Why do you think that happened? How can you test that idea?
Explain (10 minutes): Students note their observations in their Science Journals by drawing pictures.
Evaluate (5 minutes): Students share in groups what they learned. One student per group shares the group evaluation with the class. Student notes are logged on the classroom Anchor Charts, "Our Ideas about Force" and "Our Ideas about Motion".
Next Steps (3 minutes): How can we continue to explore force and motion tomorrow with the swing set?

Academy of Dover

Sample 4th Grade Lesson

Adapted from Structures of Life

Standards:	Phenomenon:	Crosscutting concepts:	Disciplinary Core Ideas:	Science & Engineering Practices:
Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.	Butterfly Eye or Desert Beetle harvesting water	Cause & Effect	L.S4.B: Natural Selection	Constructing explanations and designing solutions. <ul style="list-style-type: none"> Use evidence to construct and explanation
Lesson Specific Objective: Investigate the external structures of a beetle to analyze the impacts of those structures on its status as predator or prey				Essential Question: What can we learn about a beetle by observing its external structures?
This lesson takes 60 minutes. This unit takes approximately 3 weeks.				

External Structures of a beetle

Tier 2 Vocabulary: antennae, joint, predator, prey, pinchers, structure, territory, external

Tier 3 Vocabulary: Abdomen, adaptation, nocturnal, stridulating

Materials: Bess beetles, bess beetle bins, paper towel tunnels (one per group), magnifying strips, observation sheet, journal section of science binder, pencil, Smart Board, sticky notes, "Look What Stuck With Us" Anchor poster.

4th Grade Activity Plan

Engage (5 minutes): Students will view the butterfly eye phenomenon and turn and talk to discuss what they notice and what they wonder. A visual noise level monitor will be running on the Smart Board to help the students monitor their noise level, as beetles are sensitive to loud noises.
Explore (10 minutes): Teachers will post a photo of a bess beetle on the Smart Board and pose 3 questions. (How can we study the external structures of a beetle? What might those external structures tell us? The beetles that we will be studying today are all the same species; what can the differences between individual beetles tell us?) Students plan together how to use their materials to answer those three questions. Teacher notes plan on the Smart Board as groups note their plan in their Science Journals. Explore (15 minutes): Students use magnifying strips to investigate the beetles their groups. They note their observations on their observation sheet per their classroom routines.
Explore (15 minutes): Student groups receive a crayfish. Students use magnifying strips to compare the beetle behavior and body parts to the crayfish behavior and body parts.
Sample Questions to further thinking: Which of the external body structures indicate a defense against a predator? Which of the external body structures indicate a weakness against a predator? What do you think the pinchers do? What differences do you observe between the beetle and the crayfish? What do those differences lead us to conclude? How else can you make an observation? What else would be helpful to know?
Explain (10 minutes): Students note their “After Action Report” in their Science Journals by drawing pictures and writing bullet point key observations.
Evaluate (5 minutes): Students share in groups what they observed and what questions they now have as a result of their learning. One student per group shares the group evaluation with the class. Student notes are logged on the classroom “Look What Stuck With Us” Anchor Chart.
Next Steps: What other structures can we investigate to further inform our thinking on the structures of life?

Academy of Dover

Sample 6th Grade LessonAdapted from TCI for **Virtual Learning**: Rotation & Revolution

Standards:	Phenomenon:	Crosscutting concepts:	Disciplinary Core Ideas:	Science & Engineering Practices:
Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons.	Total Solar Eclipse	Patterns	ESS1.A: The Universe and its Stars ESS1.B: Earth & the Solar System	Developing & Using Models <ul style="list-style-type: none"> Develop & use a model to describe phenomena
Lesson Specific Objective: Use a model to sense of the relationship of the earth to the sun.				Essential Question: How can we model
This 45-minute lesson occurs on Day 2 of this unit. This unit takes approximately 2 weeks.				

Rotation & Revolution

Vocabulary: Eclipse, rotation, revolution, universe, cyclic

Materials: Student Chromebooks. Google-meet webcam session. Student choice materials for the models.

Background Knowledge: Students have begun this unit on the Earth-sun-moon system, so have some vocabulary. Students have made models in previous units.

6th Grade Activity Plan

*Note, this has been adapted for a **Virtual class**

Engage (5 minutes): Class begins via Google-meet and teacher shows a quick engagement video: Forced Perspective . Students quickly review the vocabulary from the previous lesson and then break into groups in Google-meet breakout rooms to quickly discuss the activities and lessons from the previous lesson (90 seconds).
Explore (10 minutes): Teachers will pose 3 questions. (What are the benefits of using a model to describe a phenomenon? How can students plan and use available materials at their disposal to make a model of the Earth in relation to the sun. How can some groups work together if we are in different houses?) Explore: (15 minutes): Students plan their models and submit their plans via Schoology. In this virtual platform, students may work independently or in groups of up to 3 with a plan for collaboration.
Sample Questions to further thinking: How does scale factor into this plan? What else might you use? Can your iPhone be used to help with perspective? How?
Explain (HOMEWORK): Students create a video that demonstrates their model. Their model should be clearly visible, and there should be an explanation – either a voiceover or some type of labeling system that is shown in their video.
Evaluate (explored further in Lesson 3): Students will share their videos with the class and work in groups to decide how each could be improved.
Next Steps after lesson 2 Closure: How can your model show your understanding of our phenomenon? (after lesson 3): How does understanding the Earth and its place in the Universe impact our daily lives?

High Quality Instructional Materials

Academy of Dover Science teachers are working to incorporate the big ideas of the Next Generation Performance Expectations into daily science experiences for students. We are moving away from what students learn and moving to a science class that offers students the opportunity to create learning experiences that bring science to life.

Academy of Dover is a proud member of the Delaware Science Coalition. As the coalition gradually moves from kits that focus on “what” we are learning and adopt kits that lay out a path for student exploration, we are doing our best to use the materials from the kits in a more student-centered fashion. An example of this is the included 4th grade lesson. Instead of using the lesson as developed, the teacher has adapted the lesson to encourage the students to be in control of the investigation and develop ownership of their learning. Our Upper School teachers adapt the TCI materials in a similar fashion, encouraging the students to drive their learning as often as possible. This student-centric approach is bridging the gap while the coalition works to replace all of the kits.

Additionally, we have begun integrating the Delaware End of Unit tests into our teaching. AOD teachers are using them primarily in the earlier grades as learning experiences. These provide opportunities for rich, student-focused discussions that allow students to access “test” questions in a stress-free experience.

As we seek out additional resources to bolster the materials we receive through the Coalition, AOD will be exploring [Open Sci Ed](#) and [PhD Science](#) to determine suitability for inclusion in our scope and sequence.

Science Walk Through Tool

Academy of Dover currently uses our own teacher walk-through and evaluation tool. To further delve into the specifics of a science lesson, this year, we will be exploring the Walk-through tool in Engaging Students in Science using GRC (Moulding, Huff, & van der Veen, 2017).

Professional Development Plan

Academy of Dover had begun our transition to becoming a Next Generation aligned school and was working with DOE when the state experienced the COVID 19 shut-down. Several planned events were canceled that we plan to reschedule as soon as we are able. Those include: NGSX training for teachers, NGSS training through DOE with Model Lessons and a focus on 3D teaching, and NGSS training with DOE: focus on Assessment. This year, Academy of Dover is focusing on 3D teaching and learning in a virtual format. Due to the current pandemic, we have shifted our timeline and incorporated virtual learning into professional learning communities. Our tentative timeline is:

- 2020-2021: NGSS Training through DOE, Model Lessons
- 2020-2021: Next Gen in a Virtual World training at AOD, focus on phenomenon, computer skills for productive talk, and equity
- 2021: NGSX Training for teachers through DOE
- 2021-2022: NGSS Training through DOE, focus on Assessment
- 2022: NGSX training for teachers through DOE

Trending To Equity

Equity remains a top priority at AOD. As we adapt to the big idea of learning during a pandemic, AOD teachers are making a concerted effort to provide learning opportunities that enable all students to access knowledge. As students learn to incorporate productive talk during webinars and other virtual settings, teachers are making sure to facilitate learning opportunities that encourage students to experience and explain their world using vocabulary that is comfortable to them. Teachers will then capture the excitement and introduce vocabulary to expand their learning, instead of dictating it. Further, during the pandemic, AOD has provided computer hardware and internet service to those students learning remote who might otherwise be unable to access their online classrooms.

Appendix 2 - Curriculum Documents :: Visual Arts

ACADEMY OF DOVER CHARTER SCHOOL
 VISUAL ARTS SCOPE AND SEQUENCE
 AUGUST 2021



TABLE OF CONTENTS

Mission Statement and State Standards.....	2
Scope and Sequence.....	3
Kindergarten-First Lesson Sample.....	7
Second-Third Grade Lesson Sample.....	10
Fourth Grade Lesson Sample.....	13
Fifth Grade Lesson Sample.....	16
Sixth-Seventh Grade Lesson Sample.....	18
Eighth Grade Lesson Sample.....	20

AOD's art program will help students develop creative thinking, self-expression, self-understanding, and an appreciation of the individuality of others. Art is a basic yet powerful form of communication that we want our students to know and understand. Students will have the opportunity to be creative with various materials and mediums and learn many principles of design.

DELAWARE VISUAL ARTS STANDARDS FOR K-8

Creating

Standard 1: Generate and conceptualize artistic ideas and work.

Standard 2: Organize and develop artistic ideas and work.

Standard 3: Refine and complete artistic work.

Presenting

Standard 4: Select, analyze, and interpret artistic work for presentation.

Standard 5: Develop and refine artistic techniques and work for presentation.

Standard 6: Convey meaning through the presentation of artistic work.

Responding

Standard 7: Perceive and analyze artistic work

Standard 8: Interpret intent and meaning in artistic work.

Connecting

Standard 9: Apply criteria to evaluate artistic work.

Standard 10: Synthesize and relate knowledge and personal experiences to make art.

Standard 11: Relate artistic ideas and works with societal, cultural, and historical context to deepen understanding

	K	1	2	3	4
LINE	Identify a variety of lines (thick, thin, smooth, rough..)	Identifying lines Recognize the difference between horizontal and vertical lines	Recognize horizontal, vertical, and diagonal lines	Explore variety of lines Contour Descriptive Expressive Create Linear Designs	Explore variety of lines Contour Descriptive Expressive
SHAPE	Identify variety of shapes Recognize motions/movements for drawing shapes (freeform, geometric..)	Identify variety of shapes (in nature, manmade, in artwork)	Observe and describe 2-D shapes	Observe and describe 2-D and 3-D shapes	Explore and create 3-D work
COLOR	Observe how colors create feelings Primary Warm Cool Bright Dull	Identify the primary colors Determine what color combinations create	Describe colors used in abstract art Understand the Color Wheel ROYGBIV	Explore mixing of colors Warm/Cool Primary/Secondary	Explore mixing of colors Warm/Cool Primary/Secondary Introduce Intermediate
SPACE	Observe size in space (small, medium, large) Observe placement of space (front, middle, back..)	Forms take up space Buildings in space	Describe variety of size Observe depth Recognize positive and negative space	Observe how artists use depth in 3-D shapes Recognize positive and negative space Observe foreground, middle ground, and background Recognize landscapes	Explore Proportion Explore perspective (1 point) Positive and negative Realistic proportions

FORM AND CONSTRUCTION	Observe sculptures Ceramic Paper	Build sculptures by manipulating paper Design fiber art with string and yarn Describe 3-D sculptures	Design sculptures with clay, paper Describe 3-D sculptures	Build clay sculptures Construct collages Weave using warp, weft, and knotting techniques	Explore sculptures Weave using a loom, shuttle, and yarn Sew using burlap, needles, and yarn
TEXTURE	Observe the feeling of different materials Observe and describe variety of artwork Material Exploration (clay, paint, crayons..)	Describe qualities of texture (rough, slippery, smooth..) Material exploration	Describe qualities of texture (rough, slippery, smooth..)	Create variety of textures with various materials	Compare and contrast real and implied texture
BALANCE	Even balance with animals		Identify symmetrical objects Visual rhythm	Identify symmetrical and asymmetrical objects	Identify symmetrical, asymmetrical, and radial objects Accurate proportions
HISTORY AND CULTURE	Landscape Pablo Picasso Northwest American Indian totem pole Statue of Liberty	Vincent Van Gogh Self Portrait Leonardo da Vinci, Mona Lisa Mural in Mexico	Line of Pablo Picasso Landscape Thomas Cole The Starry Night; Vincent Van Gogh	Observe American Indian works (Kachina, Navajo..) Observe Ancient Roman Art (Byzantine civilization..)	Observe spiritual use of African art (masks, carvings, sculptures..) Observe famous portraits and paintings of the United States (Copley, Revere, Washington..) Observe Chinese arts (scrolls, calligraphy..)

	5	6	7	8
LINE	Explore variety of lines Contour Descriptive Expressive	Contour Descriptive Expressive Hatch Crosshatch Direction	Contour Descriptive Expressive Hatch Crosshatch Direction Optical Illusions	Explore variety of lines Contour Descriptive Expressive Hatch Crosshatch Direction Sketch Symbolism
SHAPE	Explore and create 3-D work	Explore and create 3-D work	Explore and create 3-D work	Explore and create 3-D work Symbolism
COLOR	Explore mixing of colors Warm/Cool Primary/Secondary Introduce Intermediate Monochromatic Neutral	Explore hues, tints, shades, color families and scale Opaque Transparent	Explore hues, tints, shades, color families and scale Value Emotion Opaque Transparent	Value Contrast
SPACE	Explore proportioning, foreshortening 2-point perspective Proportions in still-life	Explore proportioning, foreshortening 2-point perspective Spatial relationships	Explore proportioning, foreshortening Perspective	Explore proportioning, foreshortening Perspective Division of Picture Plane
FORM AND CONSTRUCTION	Ceramic Paper Construct a collage Sew using fabric Create 3-D Compositions	Design sculptures and jewelry Create functional baskets	Create life-sized sculptures Design sculptures and jewelry	Surrealistic and Cubist artwork Soft Sculpture Complex baskets

	with shading and line techniques			
TEXTURE	Observe the feeling of different materials Observe and describe variety of artwork Draw and paint on varied surfaces	Describe qualities of texture (rough, slippery, smooth..)	Describe qualities of texture (rough, slippery, smooth..) Decorative texture	Create various textures using: Pencils Charcoal Colored Pencils Actual Implied
BALANCE		Identify necessary balance for "picture inside picture"	Identify symmetrical objects	Identify symmetrical and asymmetrical objects
HISTORY AND CULTURE	Art of the Renaissance Greek and Roman Art 19th Century U.S. Art of Japan	Classical Art; The art of Ancient Gothic Art Baroque The Renaissance Rococo Neoclassical Romantic Realism	Impressionism Post-Impressionism Expressionism & Abstraction Modern American Painting	Painting since World War II 20th Century Sculpture Architecture since the Industrial Revolution

KINDERGARTEN-FIRST PANDA PAINTING LESSON

GOALS AND DESIRED OUTCOMES

Timeline: 45 minutes
This lesson will take 3 class periods

Part 1: Drawing the Panda Part 2: Painting the Panda Part 3: Painting the Panda

VOCABULARY

Asia	China	Panda	Tempera Paint	Proportion	Endangered
Animal/Species		Bamboo	Zen		

RESOURCES AND MATERIALS NEEDED

Books:

***Zen Ties* by Jon J. Muth *Zen Shorts* by Jon J. Muth (Caldecott Honor Book)**

Reproductions:

Pictures of “real” pandas Pictures of Kung Fu Panda

<http://nationalzoo.si.edu/Animals/GiantPandas/>

Medium: Tempera Paint / Oil Pastel

Technology: Elmo, Projector, and Laptop

STANDARDS

VA:Cr1.2.1a Use observation and investigation in preparation for making a work of art.

VA:Cr2.1.1a Explore uses of materials and tools to create works of art or design.

ESSENTIAL QUESTIONS:

- How can we use shapes to create images?
- Where do pandas originate from?
- How do we create art from overlapping shapes?
- What is tempera paint?

LEARNING OBJECTIVES:

- ***The student will understand:*** How to draw a panda and know that pandas come from **China/Asia**. Compare and contrast a picture of a “real” panda with a

pretend panda (Kung Fu Panda). Understand the meaning of **proportion**.

- **The student will create:** a work of art that shows the use of overlapping shapes in correct proportions to create a panda, and bamboo. The students will paint the pandas and **bamboo** using correct techniques for **tempera paint**.

ASSESSMENT STRATEGIES AND GOALS

- Teacher will critique each panda painting
- Teacher will informally assess with questions about pandas and tempera paintings

EVIDENCE:
Finished painting

LEARNING PLAN

DAY 1: Drawing Pandas

- Show the pictures of the pandas and where they live on the map.
- Discuss what endangered animals are.
- Handout blank paper
- Step-by-step draw the pandas with the students using a series of overlapping circles and ovals.
- Have the students make sure that they don't have any UFO's (un- identified floating objects) in their pictures.
- The panda's body parts should be "connected" and overlapping and the panda should be sitting on the ground not floating or levitating.
- Talk about the word proportion...making sure that the panda parts look like the sizes belong together.
- Collect the pandas.
- Show the pictures of Kung Fu Panda and ask if that is a "real" panda ? What type of panda is he? What do we call it when we make believe?
- Compare and contrast the pandas.

DAY 2: PAINTING PANDAS

- Review vocabulary .
- Handout pictures.
- Demonstrate how to hold paint brushes correctly.
- Talk briefly about how tempura is different from the watercolor paints they have already used this year.

- Have the students identify the white parts of the panda that they will be painting this week.
- Have the students paint the grass and bamboo...turning their paper to reach all the areas...not reaching across their paintings.
- Clean up and set paintings aside.
- Read from *Zen Ties*...make the connection that this is another pretend panda. Ask how they know that this panda is also a pretend panda?

DAY 3: PAINTING PANDAS

- Pass out Pandas
- Review vocabulary
- Have students identify the parts of the panda that are black that they will be painting this week.
- Have the students clean up when they are done.
- Set the paintings aside to dry .

Assessment Questions

1. Where do pandas originate from?
2. How do overlapping shapes lead to the creation of a panda?
3. How do we make panda ears proportionate to the panda's body?
4. What is an endangered species?
5. How is tempera paint different from watercolor paint or acrylic paint?

SECOND-THIRD ANIMAL HABITATS LESSON

GOALS AND DESIRED OUTCOMES

Timeline: 45 minutes
This lesson will take 2 class periods

VOCABULARY

Habitat Terrain Landforms Environment Predator

Foreground Background Surrounding Diorama

Survival Curling 3 dimensional Setting Snipping

RESOURCES AND MATERIALS NEEDED

Self hardening clay Paint water or tempera Box lid or rounded plate

Construction Paper Cotton Cloths scraps Glue String or yarn

Aluminum foil Pipe cleaners Beads

Medium: paper, paint, glue, clay, and all kinds of 3d materials

Technology:

STANDARDS

VA.Cr1.2.2a

Make art or design with various materials and tools to explore personal interests, questions, and curiosity.

VA.Cr1.2.3a

Apply knowledge of available resources, tools, and technologies to investigate personal ideas through the art-making process.

ESSENTIAL QUESTIONS:

- What is a diorama?
- How can we use art to replicate nature?

LEARNING OBJECTIVES:

- Students will experience the use of 3 dimensional forms with a variety of materials. The objective is to be able to successfully manipulate the materials by cutting, curling, pinching, pulling and all the ways hands move to create form.
- This lesson gives them many opportunities to invent new ways to create and to practice instructed ways too.

ASSESSMENT STRATEGIES AND GOALS

- Teacher will critique each diorama
- Teacher will use rubric

LEVELS OF KNOWLEDGE

- 1: Describe how we can create art.
2. Describe why the same steps can be followed and have different artistic results.

LEARNING PLAN

Day 1: Introduce lessons with high enthusiasm. Create a clay creature and then build an environment where the animal will live. Instruct students in forming a plan for the habitat by painting the sky and land or terrain and discussing with each other the kinds of things their animal will need to survive. Students will have to match their chosen animal with the correct habitat.

Hand out boxes that are ready for students to begin painting. After they have created their design on paper, have them start painting their diorama.

Finish with ten minutes to clean and place them all on a table to dry before the next class.

Day 2: Step by step instruct the creation of a free standing tree trunk with tabs for feet to glue down. Use tissue paper or other paper for leaves.

Help students to use the clay to create their animals that will go inside their diorama.

Complete diorama with details such as rivers, caves, stones, shrubs, grass, clouds, flowers, insects, birds, fruit, etc. These items can be made from a multitude of scraps and materials in the art room. The more the better and the diorama becomes a masterpiece of originality.

Notes/Accommodations:

Small children (1st grade) need help with ideas to shape the animals they have chosen to make. Showing samples of a diorama helps students orient themselves to the project and gets them motivated. Inspire them to think of how they can provide food and shelter for their animals and add details to the setting like flowers and clouds and things we see every day in our own world environment.

Plan to assist one on one for differentiation needs. This lesson is not difficult but for some small students it may be their first time creating 3 dimensional objects and they will need one on one help.

Assessment Rubric

RUBRIC	1 - MASTERED	2 - SATISFACTORY	3 - UNSATISFACTORY
Craftsmanship and neatness			
Showed radial symmetry/balance			
Completed within 2 class sessions			

FOURTH LINES AND SHAPES UNIT
GOALS AND DESIRED OUTCOMES
<p>Timeline: 45 minutes This lesson will take 2 class periods</p>
<p>VOCABULARY</p> <p>horizontal, vertical, diagonal, parallel, overlapping, negative space, positive space, viewpoint, birds eye view, pattern, background</p>
<p>RESOURCES AND MATERIALS NEEDED</p> <p>Resources SRA textbooks Examples of finished artwork Maps: any city map</p> <p>Reproductions: Joseph Stella <i>The voice of the city of New York...</i> Joaquin Torres-Garcia <i>New York City-birds eye view</i></p> <p>Medium: Pencils, black markers, color pencils or Crayons, water color paint</p> <p>Materials:</p> <p>12"x18"white paper, pencils, black markers, color pencils/crayons, rulers, tracers, watercolor paints.</p>
<p>STANDARDS</p> <p>VA.Cr2.1.4a Explore and invent art-making techniques and approaches.</p>
<p>ESSENTIAL QUESTIONS:</p> <ul style="list-style-type: none"> ● How can we use lines to create art? ● What different types of lines are there?
<p>LEARNING OBJECTIVES:</p> <ul style="list-style-type: none"> ● Students will be able to create arts using geometric shapes ● Students will be able to create art using lines ● Students will explore what they can create through overlapping lines ● Students will be able to use different techniques for drawing lines
ASSESSMENT STRATEGIES AND GOALS
<ul style="list-style-type: none"> ● Teacher will assess using a rubric

LEVELS OF KNOWLEDGE

1: Describe how we can create art.

2. Describe why the same steps can be followed and have different artistic results.

LEARNING PLAN

First show the students the examples, reproductions,

and SRA materials. Then have the students turn the paper in a horizontal direction. Start the lesson with a pencil.

Show the students how to start simple

By placing the ruler in a vertical direction Anywhere along the bottom edge of the paper approximately 3" to 5" up. Next, Have them trace both sides of the ruler With vertical lines ending at the same height. Show them how to end it by drawing an arrowhead at the top. Now, have them hold the ruler horizontally coming from the right or the left side near the bottom of the paper. Make sure the lines they draw will overlap the previous lines. They need to keep all of

Their lines parallel. Now give them some options. Show them how to split their parallel lines (like a Y) with the lines going into different directions. Show them how to do curved lines, write cursive letters and words. Show them

how to make the parallel lines look like streets by drawing broken lines in the middle of the parallel lines. Show them how to draw simple cars, houses, street signs, bushes, trees, flowers, bridges, etc. Tell them that they can design playgrounds, city maps, games, etc, or you can decide which one of the lessons you want them to do. They need to have parallel lines that come from all directions, top, bottom, and both sides.

They also need to continue to overlap their parallel lines. They can do mostly straight or mostly curved lines. After they have all of the lines done, have them fill

in the negative (empty) spaces and blocks with patterns and designs. They

can fill some sections with grass, water, trees, flowers, and/or houses. This is the fun part. They now need to go over all

of their lines with a black marker. If any time is left they can use color pencils or crayons to add color and texture. Before they add any color, think about whether you want them to use a specific color scheme or if you just want them to balance their

colors. For the next lesson watercolor paint can be used to brighten it up. Afterwards, do your assessment and you are done.

Assessment Rubric

RUBRIC	1 - MASTERED	2 - SATISFACTORY	3 - UNSATISFACTORY
Craftsmanship and neatness			
Showed radial symmetry/balance			
Completed within 2 class sessions			

FIFTH Florida Highway Men Landscape LESSON
GOALS AND DESIRED OUTCOMES
Timeline: 45 minutes This lesson will take 1 class period
VOCABULARY Landscape Silhouette Color Blending Horizon Line
RESOURCES AND MATERIALS NEEDED Reproductions: HighwayMen art work Highwaymen book Palm tree and Sunrise visuals Medium: Crayon, Oil pastels Materials: Crayons, Paper , Black oil Pastel
STANDARDS VA.Cr2.3.5a Identify, describe, and visually document places and/or objects of personal significance. VA.Cr3.1.5a Create artist statements using art vocabulary to describe personal choices in art-making.
ESSENTIAL QUESTIONS: <ul style="list-style-type: none"> ● What is the difference between Foreground and Background? ● How do we keep our colors balanced when blending? ● What is a silhouette?
LEARNING OBJECTIVES: <ul style="list-style-type: none"> ● Students will be able to use crayons to blend colors ● Students will be able to describe a silhouette ● Students will be able to describe the work of the HighwayMen ● Students will be able to create work that resembles the HighwayMen art

ASSESSMENT STRATEGIES AND GOALS
<ul style="list-style-type: none"> Teacher will assess using a rubric
EVIDENCE
ACTIVITIES Students will color blend crayons to create a sunrise over their whole paper. They will then draw silhouettes of palm trees on the foreground.
LEARNING PLAN
Part 1: Look at HighwayMen art and share their story with the students. Direct students to use the colors they see in the sunrises to create their own sunrise. Part 2: Today look at palm trees with students and discuss the lines found. Students will then practice drawing silhouette palms with black oil pastel. When students are confident they can then create silhouette palms in the foreground of their sunrises.

Assessment Rubric

RUBRIC	1 - MASTERED	2 - SATISFACTORY	3 - UNSATISFACTORY
Craftsmanship and neatness			
Student created a silhouette using contrasting colors			
Students blended colors to create a sunset			

6TH-7TH GRADE COLOR SCHEME LESSON
GOALS AND DESIRED OUTCOMES
Timeline: 45 minutes This lesson will take at least 2 class periods
VOCABULARY Color theory, Color Scheme, Tempera, Color value, Angles
RESOURCES AND MATERIALS NEEDED Tempera paint, gray drawing paper, graphite pencils, objects of students choosing
STANDARDS VA.Cr1.1.6a Combine concepts collaboratively to generate innovative ideas for creating Art. VA.Cr1.2.7a Develop criteria to guide making a work of art or design to meet an identified goal.
ESSENTIAL QUESTIONS: <ul style="list-style-type: none">● What is color theory?● How can we use angles and space to create illusions in art?● What is the color scheme?
LEARNING OBJECTIVES: <ul style="list-style-type: none">● Students will be able to describe color theory● Students will be able to describe color scheme● Students will understand the concept of color● Students will be able to effectively use the color wheel
ASSESSMENT STRATEGIES AND GOALS

- Teacher will assess using a rubric as well as visually throughout the students planning their artwork

LEARNING PLAN

The teacher will begin by presenting the concepts of color theory including the color wheel, color values, and color schemes. Students will paint a color wheel, and complete color theory worksheets. The teacher will then introduce the assignment..

Students will bring in objects that they would like to use in their artwork. If the student fails to bring in objects, the teacher may choose to assign objects to students. The student will draw the object from observation. The teacher should encourage the student to draw the object from many different angles and try to create the illusion of space on the surface. The student will then divide the paper into three sections. The student will then paint the different sections with a different color scheme of their choosing. The teacher should encourage the students to use a full range of value in their artwork. When finished, the student should write the specific name of the color scheme (monochromatic, analogous, etc.) used on the back of the paper.

Assessment Rubric

RUBRIC	1 - MASTERED	2 - SATISFACTORY	3 - UNSATISFACTORY
Student brought in an object to draw			
Student drew the object from several different angles			
Student chose and correctly labeled their color scheme			

8TH GRADE CLAY LESSON
GOALS AND DESIRED OUTCOMES
Timeline: 45 minutes This lesson will take at least 2 class periods
VOCABULARY Form, Manipulate
RESOURCES AND MATERIALS NEEDED White earthenware clay, bats, water, kiln
STANDARDS VA.Cr1.1.8a Document early stages of the creative process visually and/or verbally in traditional or new media. VA.Cr2.1.8a Demonstrate willingness to experiment, innovate, and take risks to pursue ideas, forms, and meanings that emerge in the process of art- making or designing.
ESSENTIAL QUESTIONS: <ul style="list-style-type: none">● How can we manipulate clay to create objects?● How can we describe our building process?
LEARNING OBJECTIVES: <ul style="list-style-type: none">● Students will be able to manipulate clay.● Students will be able to describe their hand building technique● Students will understand the difference between form and shape
ASSESSMENT STRATEGIES AND GOALS

- Teacher will assess using a rubric as well as visually throughout the students planning their artwork

LEARNING PLAN

Teacher will use the document camera to show a demonstration on the technique of scoring and slipping clay for attachment. Students should be fully aware of the proper techniques for connecting pieces of clay together.

Students will build their pieces in class while the teacher walks around and monitors progress. Be sure to have a good place to store the clay sculptures. A wet cabinet is best, although they are expensive to purchase. A nice alternative is a shelf. To keep the pieces moist so that they don't dry out too quickly, wrap them in plastic bags. Once the figures can stand on their own, you can take a sandwich bag and lay it on top, so that the piece is covered on the top but can begin to dry slowly from the bottom. Be sure that students create a base for the clay figures to stand on. Encourage students to be creative with their clay base. It's also a good idea to have them build the base first, and then proceed to creating the clay figure itself.

Assessment Rubric

RUBRIC	1 - MASTERED	2 - SATISFACTORY	3 - UNSATISFACTORY
Craftsmanship and neatness			
Student designs their object so that it can stand			
Student follows the correct steps to create their object			

Appendix 2 - Curriculum Documents :: Music

ACADEMY OF DOVER CHARTER SCHOOL
MUSIC SCOPE AND SEQUENCE
 August 2021



TABLE OF CONTENTS

Mission Statement and State Standards.....	2
Scope and Sequence.....	3
4th Grade Band topics.....	7
4th Grade Chorus topics.....	8
Band and Chorus Assessments.....	9
Kindergarten-First Lesson Sample.....	10
Second-Third Grade Lesson Sample.....	12
Fourth-Fifth Grade Lesson Sample.....	14
Sixth Grade Lesson Sample.....	17
Seventh-Eighth Grade Lesson Sample.....	19

AOD's music program will help and encourage students to gain independence and learn more music skills. They will be given opportunities to strengthen their knowledge of musical concepts and history through experience, exploration, discovery, and self-expression. The Music Classroom will center on active participation in music-making through the band, strings, and choral programs. Their work will culminate in Winter and Spring concerts to allow students and families to share in their musical experiences and education.

DELAWARE MUSIC STANDARDS FOR K-8

CREATING

ANCHOR STANDARD 1: Generate and conceptualize artistic ideas and work.

ANCHOR STANDARD 2: Organize and develop artistic ideas and work.

ANCHOR STANDARD 3: Refine and complete artistic work.

PERFORMING

ANCHOR STANDARD 4: Select, analyze, and interpret artistic work for presentation.

ANCHOR STANDARD 5: Develop and refine artistic techniques and work for presentation.

ANCHOR STANDARD 6: Convey meaning through the presentation of artistic work.

RESPONDING

ANCHOR STANDARD 7: Perceive and analyze artistic work

ANCHOR STANDARD 8: Interpret intent and meaning in artistic work.

ANCHOR STANDARD 9: Apply criteria to evaluate artistic work.

CONNECTING

ANCHOR STANDARD 10: Synthesize and relate knowledge and personal experiences to make art.

ANCHOR STANDARD 11: Relate artistic ideas and works with societal, cultural, and historical context to deepen understanding

	K	1	2	3	4
ELEMENTS	Basic Rhythm Steady beat Difference between fast and slow Difference between loud and soft Difference between long and short Movement	Basic Rhythm Steady beat Difference between fast and slow Difference between loud and soft Difference between long and short Movement Melodic direction Difference between high and low pitches	Basic Rhythm Steady beat Difference between fast and slow Difference between loud and soft Difference between long and short Movement Melodic direction Difference between high and low pitches Musical note names Scales Staff	Basic Rhythm Steady beat Difference between fast and slow Difference between loud and soft Difference between long and short Movement Melodic direction Difference between high and low pitches Musical note names Scales Staff Recognize outline of a song Treble clef Meter Signatures	Basic Rhythm Movement Melodic direction Musical note names Scales Staff Recognize outline of a song Treble clef Meter Signatures Recognize theme & variations
PLAYING		Play simple rhythms Echo simple melodies Echo short rhythms and melodic patterns Tone color	Sing C Major Scale on "Do, Re, Mi, etc" Echo short rhythms and melodic patterns	Sing C Major Scale on "Do, Re, Mi, etc" Sing simple melodies Sing simple melodies accompanied and unaccompanied	Play simple melodies on various instruments Sing simple melodies accompanied and unaccompanied
RHYTHM		Become familiar with whole, Half, and quarter note	Become familiar with whole, Half, and quarter note Become familiar with whole, half, and quarter	Review whole, Half, eighth, and quarter note 4/4 2/4 and 3/4 meter Review whole, half, and quarter rest	Review whole, Half, eighth, and quarter note Review whole, half, and quarter rest Review 4/4 2/4 and 4/3

			rest		meter
LISTENING AND UNDERSTANDING	Recognizing instruments (guitar, piano, trumpet, flute, violin, drum)	Composers Orchestra Opera Ballet Jazz	Observe difference between piano, keyboard, and organ Instrument families	Review instrument families 4/4 2/4 and 4/3 meter Recognize the difference between vocal ranges (soprano, alto, tenor, bass) Gregorian chant	Review instrument families 4/4 2/4 and 4/3 meter Recognize the difference between vocal ranges (soprano, alto, tenor, bass) Gregorian chant Introduce sharps & flats Bar lines Names of lines and spaces Recognize harmony
SONGS	London bridge Row your boat This old man The wheels on the bus Go tell aunt rhody In the hall of the mountain king Bingo The bear went over the mountain	America the beautiful For he's a jolly good fellow La cucaracha Oh! Susanna On top of old smokey She'll be coming around the mountain Take me out to the ball game When the saints go marching in Yankee Doodle	Casey Jones Follow the Drinking Gourd Home on the range The Star- Spangled banner Then Johnny comes marching home This land is your land	America ("My country 'tis of thee") Down in the valley You're a grand ol Flag Alouette	Auld Lang Syne Cockles and Mussels Comin' through the Rye I love the Mountains My Grandfather's Clock

	5	6	7	8
ELEMENTS	<p>Melodic direction Musical note names Scales Staff Recognize outline of a song Treble clef Meter Signatures Recognize theme & variations Recognize legato movement Sharps, flats, & Naturals</p>	<p>Melodic direction Musical note names Scales Staff Recognize outline of a song Treble clef Meter Signatures Recognize theme & variations Recognize legato movement Recognize italian terms (grave, largo, adagio, etc) Identify chords Octave Dynamics Sharps, flats, & Naturals</p>	<p>Melodic direction Musical note names Scales Staff Recognize outline of a song Treble clef Meter Signatures Recognize theme & variations Recognize legato movement Recognize italian terms (grave, largo, adagio, etc) Identify chords & names Octave Dynamics Sharps, flats, & Naturals</p>	<p>Melodic direction Musical note names Scales Staff Recognize outline of a song Treble clef Meter Signatures Recognize theme & variations Recognize legato movement Recognize italian terms (grave, largo, adagio, etc) Identify chords & names Octave Dynamics Sharps, flats, & Naturals</p>
PLAYING	<p>Play simple melodies on various instruments Sing complex melodies accompanied and unaccompanied Echo complex rhythms</p>	<p>Play simple melodies on various instruments Sing complex melodies accompanied and unaccompanied Echo complex rhythms</p>	<p>Play complex melodies on various instruments accompanied by other melodies Sing complex melodies accompanied and unaccompanied Echo complex rhythms</p>	<p>Play complex melodies on various instruments accompanied by other melodies Sing complex melodies accompanied and unaccompanied Echo complex rhythms</p>
RHYTHM	<p>Review whole, Half, eighth, and quarter note Review whole, half, and</p>	<p>Review whole, Half, eighth, and quarter note Review whole, half, and</p>	<p>Review whole, Half, eighth, and quarter note Review whole, half, and</p>	<p>Review whole, Half, eighth, and quarter note 4/4 2/4 and 3/4 meter</p>

	<p>quarter rest Review 4/4 2/4 and 4/3 meter Introduce grouped 16th notes & paired eighth notes Tied & dotted notes</p>	<p>quarter rest Review 4/4 2/4 4/3 3/4 6/8 meter Review grouped 16th notes & paired eighth notes Tied & dotted notes</p>	<p>quarter rest Review 4/4 2/4 4/3 3/4 6/8 meter Review grouped 16th notes & paired eighth notes Tied & dotted notes</p>	<p>Review whole, half, and quarter rest Tied & dotted notes</p>
LISTENING AND UNDERSTANDING	<p>Review instrument families 4/4 2/4 and 4/3 meter Recognize the difference between vocal ranges (soprano, alto, tenor, bass) Gregorian chant Introduce sharps & flats Tied & dotted notes Bar lines Names of lines and spaces Recognize harmony Sing & play melodies while reading scores Sing round and canons 2 & 3-part singing</p>	<p>Review instrument families 4/4 2/4 and 4/3 meter Recognize the difference between vocal ranges (soprano, alto, tenor, bass) Gregorian chant Introduce sharps & flats Tied & dotted notes Bar lines Names of lines and spaces Recognize harmony Sing & play melodies while reading scores Sing round and canons 2 & 3-part singing</p>	<p>Review instrument families 4/4 2/4 and 4/3 meter Recognize the difference between vocal ranges (soprano, alto, tenor, bass) Gregorian chant Introduce sharps & flats Tied & dotted notes Bar lines Names of lines and spaces Recognize harmony Sing & play melodies while reading scores Sing round and canons 2 & 3-part singing</p>	<p>Review instrument families 4/4 2/4 and 4/3 meter Recognize the difference between vocal ranges (soprano, alto, tenor, bass) Gregorian chant Introduce sharps & flats Tied & dotted notes Bar lines Names of lines and spaces Recognize harmony Sing & play melodies while reading scores Sing round and canons 2 & 3-part singing</p>
SONGS	<p>Battle Hymn of the Republic Danny Boy God Bless America Greensleeves Havah Nagilah Red River Valley Sakura</p>	<p>Baroque, Classical, and Romantic music</p>	<p>Baroque, Classical, and Romantic music American Music Jazz African American Music Musical Theater</p>	<p>Baroque, Classical, and Romantic music American Music Jazz African American Music Opera Musical Theater</p>

4th-8th grade band

TOPICS:

BREATH: MEMORIZING AND EXECUTING A VARIETY OF VOCAL DRILLS WHILE PRACTICING GOOD VOCAL SKILLS

DICTION/VOWEL FORMATION: VOCALIZING VOWELS, CONSONANTS AND MULTIPLE LANGUAGES

RANGE/PITCH/INTONATION: SINGING ON PITCH AND CORRECTLY PLACING SOUND, CONTROLLING BREATH; EAR TRAINING

POSTURE: FACIAL/BODY RESONATORS, CORRECT SEATING AND STANDING

VOCAL HEALTH: VOCAL ANATOMY, VOCAL REST, AND PERFORMANCE PRACTICE

MELODY: PERFORMING A VARIETY OF REPERTOIRE WITH PITCH ACCURACY, UNISON BLEND, TWO PART, CHORD PROGRESSION AS WELL AS HARMONY AND TEXTURE

HARMONIC BLEND: HARMONIES THROUGH ROUNDS AND DUETS

MUSIC SKILLS: GROUP/INDIVIDUAL COMPOSITION, MUSIC NOTATION, RHYTHM READING, TONAL PATTERNS

REHEARSAL ROUTINE: PREPAREDNESS, UNDERSTANDING OF CUES AND CUT OFFS

VOCAL WARM-UPS: MEMORIZATION AND EXECUTION OF VOCAL DRILLS

SIGHT SINGING: SINGING SCALES AND SIGHT READING

CONCERT REPERTOIRE: INDIVIDUAL/GROUP INSTRUCTION AND VOCAL MODELING

CONCERT PERFORMANCE: SPRING/WINTER CONCERT

CONCERT ETIQUETTE: PERFORMANCE PRACTICE, DRESS CODE, AND ATTENDANCE

CULTURAL MUSIC: ACCULTURATING TO A VARIETY OF CULTURAL REPERTOIRE

MUSIC GAMES: PLAYING COOPERATIVE GAMES TO IMPROVE MUSICIANSHIP

MUSICIANSHIP: KNOWLEDGE OF MUSIC NOTATION, RHYTHMIC NOTATION, TEXTURE, SYMBOLS, DYNAMICS, TIME AND KEY SIGNATURES, INTERVALS, MELODIC DICTATION, FORMS, AND AUDIATIO

4th-8th grade chorus

TOPICS:

REHEARSAL ROUTINE: PREPAREDNESS, UNDERSTANDING OF CUES AND CUT OFFS

INSTRUMENT CARE: CLEANING THE INSTRUMENT, REED CARE, OILING OF VALVES

BALANCE: MELODY AND HARMONY; PYRAMID OF SOUND

TONE PRODUCTION: PRODUCE GOOD CLEAR TONE

NOTES AND RHYTHMS: COUNTING NOTES AND RESTS AND PLAYING SYNCOPATED RHYTHMS AND STEADY BEATS

INTONATION: PLAYING IN TUNE WITH OTHERS. TIGHTENING AND LOOSENING ACCORDINGLY

DYNAMICS: UNDERSTANDING THE MEANING OF DYNAMICS AND EXECUTING THEM

KEY SIGNATURE: KNOWING THE KEY OF THEIR OWN INSTRUMENT RELATED TO CONCERT PITCH; IDENTIFY THE KEY ON ANY PIECE OF MUSIC.

TIME SIGNATURE: IDENTIFY THE TIME SIGNATURE AND PLAY ACCORDINGLY

NOTE NAMES AND FINGERINGS: IDENTIFY NOTE NAMES QUICKLY AND ACCURATELY

SCALES: PLAY 7 CONCERT SCALES; QUARTER NOTE = 80-120 BPM

INSTRUMENT IDENTIFICATION: IDENTIFY INSTRUMENTS STATING THEIR INSTRUMENT FAMILY AND HOW THEY ARE PLAYED

VOCAL WARM-UPS: MEMORIZATION AND EXECUTION OF VOCAL DRILLS

SIGHT READING: PLAYING SCALES AND SIGHT PLAYING

CONCERT REPERTOIRE: INDIVIDUAL/GROUP INSTRUCTION AND INTONATION MODELING

CONCERT PERFORMANCE: SPRING/WINTER CONCERT

CONCERT ETIQUETTE: PERFORMANCE PRACTICE, DRESS CODE, AND ATTENDANCE

CULTURAL MUSIC: ACCULTURATING TO A VARIETY OF CULTURAL REPERTOIRE

MUSICIANSHIP: KNOWLEDGE OF MUSIC NOTATION, RHYTHMIC NOTATION, TEXTURE, SYMBOLS, DYNAMICS, TIME AND KEY SIGNATURES, INTERVALS, FORMS

Band and Chorus Assessments:

- 1.INDIVIDUAL ASSESSMENT
- 2.COLLABORATIVE ASSESSMENT
- 3.PEER CRITIQUE AND REVIEW
- 4.REPERTOIRE ASSESSMENT
- 5.INSTRUCTOR OBSERVATION (VISUAL AND AURAL)
6. SELF-REFLECTION
- 7.NOTE ACCURACY TESTS
- 8.IDENTIFICATION TESTS

	4	3	2	1
PITCH STUDENT PERFORMED ALL THE CORRECT NOTES	ALWAYS	MOSTLY	SOMETIMES	NEVER
RHYTHM STUDENT PERFORMED THE RHYTHM CORRECTLY	ALWAYS	MOSTLY	SOMETIMES	NEVER
TEMPO STUDENT KEPT A STEADY SPEED THROUGHOUT	ALWAYS	MOSTLY	SOMETIMES	NEVER
-tone QUALITY STUDENT PLAYED/SANG WITH A CLEAR QUALITY SOUND	ALWAYS	MOSTLY	SOMETIMES	NEVER
POSTURE STUDENT IS SITTING UP STRAIGHT WITH THEIR BACK NOT AGAINST THE CHAIR	ALWAYS	MOSTLY	SOMETIMES	NEVER

KINDERGARTEN-FIRST SINGING LESSON		
<p>STANDARDS: (MU: Cr1.1.K) b With guidance, generate musical ideas (such as movements or motives).</p>	<p>RESOURCES: Little Sally Walker Rhyme</p>	<p>LESSON GOALS: Students will understand steady beat Students will be able to chant and maintain steady beat simultaneously Students will be able to sing a simple melody</p>
<p>LESSON OBJECTIVES: Students will demonstrate an understanding of <i>steady beat</i> as they participate in this passing game. Singing, alone and with others, a varied repertoire of music; and Performing on instruments, alone and with others, a varied repertoire of music.</p>		
<p>PROCEDURES</p>		
<p>Step 1</p> <p>Teach <i>Little Sally Walker</i>. Begin by chanting the lyrics phrase by phrase. When your students have learned the first phrase, move on to the next phrase. Maintain a steady beat throughout this process by tapping the quarter note on your knees.</p> <p style="padding-left: 40px;">Little Sally Walker, Sitting in a saucer, Rise Sally rise, Wipe out your eyes, Turn to the east, And turn to the west, And turn to the one that you like best.</p> <p>Step 2</p> <p>Ask students to sit in a circle. Choose a student to stand in the middle of the circle. This student will be the first "it" child.</p>		

Step 3

Ask students to chant the "Little Sally Walker" rhyme while patching a steady beat on their knees. The "it" student follows the directions provided by the chant.

Little Sally Walker - Sit in the middle of the circle.

Sitting in a saucer - Remain seated.

Rise Sally rise - Stand up.

Wipe out your eyes - Wipe eyes.

Turn to the east - Spin in one direction with right arm extended and index finger pointing at students in the circle.

And turn to the west - Spin in the opposite direction.

And turn to the one that you like best - Stop spinning. This student is the next "it" child.

Step 4

Repeat several times to allow 4-5 students to be selected as the "it" child.

Assessment

Students will be assessed visually and aurally. Their goal is to be able to sing the song "Little Sally Walker" while maintaining a steady beat which they will keep while passing the cup.

Grading Scale (Rubric):

- 1- Student is able to sing all words of "Little Sally Walker"
- 2- Student is able to sing most words of "Little Sally Walker" while keeping a somewhat steady beat
- 3- Student is able to sing all words of "Little Sally Walker" while keeping a somewhat steady beat
- 4- Student is able to sing all words of "Little Sally Walker" while keeping a steady beat

SECOND-THIRD GAME LESSON		
<p>STANDARDS: (MU: Cr1.1.K) b With guidance, generate musical ideas (such as movements or motives).</p>	<p>RESOURCES: Entry Kentry Sheet Music Large Plastic cup or bean bag Tubanos, hand drums, and/or rhythm sticks</p>	<p>LESSON GOALS: Students will understand steady beat Students will be able to chant and maintain steady beat simultaneously Students will be able to sing a simple melody</p>
<p>LESSON OBJECTIVES: Students will demonstrate an understanding of <i>steady beats</i> as they participate in this passing game. Singing, alone and with others, a varied repertoire of music; and Performing on instruments, alone and with others, a varied repertoire of music.</p>		
<p>PROCEDURES</p>		
<p>Step 1</p> <p>Teach the lyrics to <i>Entry Kentry</i>. Begin by chanting the lyrics phrase by phrase. When your students have learned the first phrase, move on to the next phrase. Maintaining a steady beat throughout this process by tapping the whole note on your knees will increase the success of the students during game play.</p>		
<p>Step 2</p> <p>Learn the melody to <i>Entry Kentry</i>. Ask the students to perform the song phrase by phrase as you play the melody on the piano. When your students have learned the first phrase, move on to the next phrase. When the students seem confident, ask them to sing the song all the way through with you at the piano.</p>		
<p>Step 3</p> <p>Teach the students how to pass the plastic cup (or bean bag). Ask the students to sit in a circle. Ask them to draw a big McDonald's 'M' in the air. Tell them, "This is the way you should pass the cup. Pick it up, and set it down in the shape of the Golden Arch."</p>		
<p>Step 4</p> <p>Practice passing the cup. Pass the cup each measure (whole note). Ask the students to keep the beat (the whole note) on their knees as they pass the cup around the</p>		

circle. When they are successful, try playing the music as they pass the cup.

Game Instructions

The objective of this passing game is for one student to become the final player, eliminating one player with each round. Each time the cup is set in motion, it continues to be passed around the circle until the song ends. The student receiving the cup at the end of the song is out. When a player is sent out, they receive a drum or a rhythm stick and continue to participate developing their steady beat skills as a 'music maker' until the end of the game.

Assessment

Students will be assessed visually and aurally. Their goal is to be able to sing the song "Entry Key" while maintaining a steady beat which they will keep while passing the cup.

Grading Scale (Rubric):

- 1- Student is able to sing all words of "Entry Key"
- 2- Student is able to sing most words of "Entry Key" while keeping a somewhat steady beat
- 3- Student is able to sing all words of "Entry Key" while keeping a somewhat steady beat
- 4- Student is able to sing all words of "Entry Key" while keeping a steady beat

FOURTH-FIFTH GRADE RHYTHM LESSON		
<p>STANDARDS: (MU:Cr1.1.4) b Generate musical ideas (such as rhythms, melodies, and accompaniment patterns) within specific related tonalities, meters, and simple chord changes.</p> <p>(MU:Cr2.1.4) b Use standard and/or iconic notation and/or recording technology to document personal rhythmic, melodic, and two chord harmonic musical ideas.</p> <p>(MU:Cr3.2.4) a Present the final version of personal created music to others that demonstrates craftsmanship, and explain connection to expressive intent.</p>	<p>RESOURCES:</p> <p>Non-pitched percussion instruments Pencils Papers</p>	<p>LESSON GOALS: Students will recognize eighth and quarter note rhythmic patterns Students will be able to create their own rhythmic pattern Students will be able to read simple rhythmic patterns</p>
<p>LESSON OBJECTIVES:</p> <p>Students work in cooperative groups (bands) to perform the rhythms of a rhyme/speech piece on non-pitched percussion instruments. The winning band is awarded a 'Battle of the Bands' certificate.</p>		
<p>PROCEDURES</p>		
<p>Step 1</p> <p>Tell students, "Today you will have the opportunity to participate in a Battle of the Bands. Each of the winners of the Battle of the Bands will be awarded this certificate. (Show certificate.) Before we divide the class into bands, let's go to the white board."</p>		
<p>Step 2</p> <p>Review eighth note/quarter note rhythm patterns to prepare students for the activity.</p>		
<p>Step 3</p> <p>Ask students to get into groups with four students per group.</p>		

Step 4

Provide each band with non-pitched percussion instruments and two copies of the selected rhyme/rhythm worksheet.

Step 5

Tell students, "The rhyme/rhythm worksheets will provide you with rhythmic ideas for your music. Speak the words, listen to the rhythms and use them in your music. You will have 10 minutes to work on your piece. You can choose to perform the rhyme with instruments only or play and chant the rhyme. At the end of the practice time we will listen to each band perform.

Bands will be judged based on:

- 1) Tempo (Did the band have a steady beat?)
- 2) Rhythm (Were the rhythms performed correctly?)
- 3) Balance (Could all the instruments be heard? If students chant the rhyme could every voice be heard?)

Step 6: Practice. Teacher will circulate the classroom to help students.

Step 7

Tell students, "It's time to begin the 'Battle of the Bands.' Please place rhyme/rhythm worksheets and instruments on the floor."

Step 8: Review evaluation criteria.

Step 9

Listen to and evaluate each performance. Ask the class how they did. Was the beat steady? Were the rhythms performed correctly? Could all the parts be heard? Ask students to clap for each performance while you point to a number on the Applause-O-Meter. Record the score on the white board.

Step 10

Award the best band with Battle of the Bands certificates. (Two certificates are included. One certificate requires a name and one certificate has no line for a name so it can be quickly handed to the student.)

Assessment

Students will be assessed visually and aurally by their peers and teacher.
A rubric will be followed:

RUBRIC	1- Mastered	2- Satisfactory	3- Unsatisfactory
Creativity & Originality			
Accuracy of notes			

SIXTH GAME LESSON		
<p>STANDARDS: (MU:Cr2.1.6) b Use standard and/or iconic notation and/or audio/ video recording to document personal simple rhythmic phrases, melodic phrases, and two- chord harmonic musical ideas.</p>	<p>RESOURCES: Materials White Board Marker</p>	<p>LESSON GOALS: Students will read simple rhythms Students will write simple rhythms</p>
<p>LESSON OBJECTIVES: Students will demonstrate an understanding of simple rhythms by reading and performing rhythms to win tic-tac-toe squares in this musical twist on the classic "Tic-Tac-Toe" game. Reading and notating music</p>		
<p>PROCEDURES</p> <p>Step 1: Draw the nine box game board on the white board.</p> <p>Step 2</p> <p>Write a four beat rhythm in each of the nine boxes appropriate to the skill level of the class. Quarter notes, eighth notes and quarter rests work well with primary age classes.</p> <p>Step 3</p> <p>Practice each rhythm by modeling it for the class. Give a few students the opportunity to demonstrate the rhythm for the class before you model it. Quiz students periodically on the last rhythm you practiced.</p> <p>Step 4</p> <p>Divide the class into two (2) teams and then ask them to find a partner. Boys vs. Girls always works well.</p> <p>Step 5</p>		

Assign the 'X' to one team and the 'O' to the other. Then select the team who will begin the game.

Game Instructions

From the starting team, invite the first pair to the white board. Ask them to select a rhythm from the tic-tac-toe game board. Tell them that they will have an opportunity to practice the rhythm before they perform it for the class.

When they are ready, count off 1-2-3-4.

If they clap the rhythm correctly their team will receive an 'X' or 'O' in the square. If they clap the rhythm incorrectly, no 'X' or 'O' will be placed in the square.

Teams alternate whether the rhythm is clapped correctly or not.

Repeat inviting pair after pair to the white board until either team achieves Tic-Tac-Toe-Three-in-a-Row or the game ends in a cat's game.

Assessment

Students will be assessed visually on how accurate their note placement is. They will also be assessed on how well they are reading the rhythms on the board. Students will also be quizzed before playing the game. Each student will have a chance to read a rhythm on the board and clap it back to the teacher.

Grading Scale (Rubric):

- 3- Student is able to clap each beat of their rhythm correctly
- 2- Student is able to clap some beats of their rhythm correctly
- 1- Student is unable to clap any beat of their rhythm correctly

SEVENTH-EIGHTH MUSICAL FORM LESSON		
<p>STANDARDS: (MU:Cr3.1.7) a Evaluate their own work, applying selected criteria such as appropriate application of elements of music including style , form , and use of sound sources.</p> <p>(MU:Cr3.1.8) a Evaluate their own work by selecting and applying criteria including appropriate application of compositional techniques, style, form, and use of sound sources.</p>	<p>RESOURCES: Recording of Johannes Brahms' Hungarian Dance No.5</p>	<p>LESSON GOALS: Students will be able to Students will write simple rhythms</p>
<p>LESSON OBJECTIVES: Students will learn about Johannes Brahms and his music through a fun-filled lesson on musical form. Listening to, analyzing, and describing music.</p>		
<p>PROCEDURES</p> <p>Ask students, "Who knows this song? Raise your hand if you think you recognize it." Play a recording or piano arrangement of Brahms' Lullaby.</p> <p>Step 2: Ask students, "What is it?" "Who wrote it?"</p> <p>Step 3</p>		

Tell students, "The piece I just played was written by German composer Johannes Brahms." Show them a picture of the composer.

Step 4

Share a few historical or fun facts about Johannes Brahms. Below are two fun facts that are not to be missed.

In 1889 Thomas Edison, an American inventor, visited Brahms in Vienna and invited him to perform for an experimental recording. Brahms played an abbreviated version of Hungarian Dance No.1 on the piano. The performance is one of the earliest recordings by a major composer.

Brahms was one of the few music composers who could devote his time completely to composing without having to accept other employment. In fact, he spent so much time composing that he sometimes neglected his appearance. Sometimes, when he forgot to attach his suspenders, he would have to hold his pants up while conducting to keep them from falling down.

Step 5

Tell students, "Today we will be learning about musical form and listening to Johannes Brahms' Hungarian Dance No.5. Musical form has to do with the way music is put together.

As you listen to the recording I will show you how the music is put together. Each time a new section begins I will assign an alphabet letter to it. The first section will be A, the second section will be B, the third section will be C, and the fourth section will be D. Some of the sections repeat. If you hear a section of the music that you heard before, raise your hand before I write the alphabet letter on the board.

Step 6: Start the recording.

Form: A A B B C D A B Codetta

Step 7

Tell students, "When we listen to this recording again we will put baseball moves to

the music."

Step 8: Tell students, "Please stand up, spread out around the room, and face me."

Step 9

Tell students, "The A section is the warm-up section. You can copy my warm-up routine or do your own." Students may pretend to jog in place, stretch, or do jumping jacks.

Step 10

Start the recording. Tell students, "Warm-up as you listen to section A of Johannes Brahms' Hungarian Dance No.5."

Step 11

The next section is the B section. Tell students, "You will be at bat during this section of the music."

Step 12

Start the recording. Students will swing the bat 3 times during each statement of this theme. Twice before the slow passage (swing on the syncopated note) and once after the slow passage (swing on the loud note immediately following the slow passage).

Step 13

The next section is the C section. Tell students, "During this section of the music you will run the bases."

Step 14: Start the recording. Run around the room as a class in clockwise motion.

Step 15

The next section is the D section. Tell students, "During this section of the music you will perform an instant replay of the game."

Step 16

Start the recording. Hold the bat at ready position during the slow passage and then swing on the loud note immediately following the slow passage. Drop the bat and run the bases on the fast passage. Repeat.

Step 17

Perform the movements for the reprise of the A and B sections. Play a little of each section for the students before they begin the movement. Ask them to identify the section and the movement that accompanies it.

Step 18: Tell students, "The work ends with a codetta. The word coda is Italian for 'tail.'" It refers to music that is placed at the tail-end of a piece to bring it to its conclusion. A codetta is like a coda except shorter.

Step 19

Tell students, "When we hear the three note codetta we will jump up and throw our baseball hats in the air."

Step 20: Start recording. Jump up and throw our baseball hats in the air.

Step 21: Quiz students on historical or fun facts about Johannes Brahms.

Step 22

Lead the students through a guided practice of the entire piece without stopping.

Step 23: Quiz students on historical or fun facts about Johannes Brahms.

Step 24: Ask students to show their understanding of the form of this work by performing the movements to Hungarian Dance No.5 on their own.

Assessment

Students will be assessed visually and aurally throughout the lesson. They will be assessed at the start when asked about returning sections as the music is playing. They will be assessed through the movements they perform as they correspond to the section of the song that they are hearing.

At the end of the lesson, students will take a formative assessment in the form of a small quiz. The quiz will test what they remember about Brahms.

Grading Scale (Rubric): (Yes or No)

Student can distinguish between Section A and Section B _____

Student can distinguish between Section B and Section C _____

Student can distinguish between the Codetta and sections A, B, and C _____

Student has trouble keeping track of the 4 sections _____

Appendix 3 - Current Organizational Chart

Delaware Department of Education

Discipline Incidents by GradeLevel in School Year 2020

District / School Name	Total	KG	01	02	03	04	05
Total	76	1	6	20	8	18	23
Academy of Dover Charter School	76	1	6	20	8	18	23
0-1 incidents	45	1	1	13	7	14	9
2-5 incidents	29		5	6	1	4	13
6+ incidents	2			1			1
Academy of Dover Charter School	76	1	6	20	8	18	23
0-1 incidents	45	1	1	13	7	14	9
2-5 incidents	29		5	6	1	4	13
6+ incidents	2			1			1

Appendix 4 - Board Governance Training Certificates/Documents



DANA

LEADING
THE SECTOR
FORWARD

Delaware Alliance for
Nonprofit Advancement

Delaware Alliance for Nonprofit Advancement
recognizes that

Kimeu Boynton

has completed

Foundation for Board Excellence™ Training
for Charter Schools

August 7, 2015

Paul Stock

Paul Stock

Standards for Excellence® Licensed Consultant

John D. Baker

John D. Baker, CFRE, MPA

Standards for Excellence® Licensed Consultant



DANA

LEADING
THE SECTOR
FORWARD

Delaware Alliance for
Nonprofit Advancement

Delaware Alliance for Nonprofit Advancement
recognizes that

Dr. Charles Fletcher

has completed

Foundation for Board Excellence™ Training
for Charter Schools

August 7, 2015


Paul Stock

Standards for Excellence® Licensed Consultant


John D. Baker, CFRE, MPA

Standards for Excellence® Licensed Consultant



Public Integrity Commission

presents

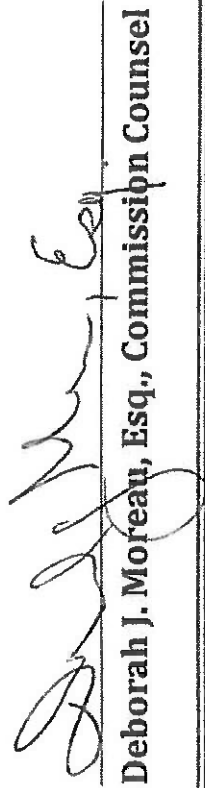
Certificate of Attendance

to

Kimeu Boynton

for

Ethics in State Government


Deborah J. Moreau, Esq., Commission Counsel

August 13, 2015



Public Integrity Commission

presents

Certificate of Attendance

to

Charles Fletcher

for

Ethics in State Government

A handwritten signature in black ink, appearing to read "Deborah J. Moreau, Esq.", written over a horizontal line.

Deborah J. Moreau, Esq., Commission Counsel

August 13, 2015



Certificate of Completion

Charles Fletcher

**Citizen Budget Oversight Committee
&
Board Member Finance Training**

September 15, 2015

A handwritten signature in black ink, appearing to read "Brook A. Hughes".

Brook A. Hughes, Education Associate
Delaware Department of Education



Certificate of Completion

John Leone

**Citizen Budget Oversight Committee
&
Board Member Finance Training**

September 15, 2015

A handwritten signature in black ink, appearing to read "Brook A. Hughes".

Brook A. Hughes, Education Associate
Delaware Department of Education

Appendix 6 - Current Board Bylaws

Academy of Dover

School Board Policies

Table of Contents		Page #
000	Local Board Procedures	
001	Name and Classification	5
002	Board Procedures	6
003	Membership	7
004	Board Code of Ethics	8
005	Meetings	9
006	Conflict of Interest	10
100	Programs	
101	Philosophy	14
102	Affirmative Action Policy	15
103	Multicultural/Non-Discrimination Policy	16
104	Resource Materials	17
105	Instructional Methods, Materials, and Supplies	18
106	Technology Protection Measure and Internet Safety	20
107	Special Education	21
108	Section 504	22
109	Fund Raising	23
110	Field Trips	24
111	Extra-Curricular Activities	25
112	Drug-Free Workplace	26
113	Smoke-Free Workplace	28
114	Monitoring and Reporting Employee Attendance	29
115	Job Abandonment	30

200	Pupils	
201	School Choice	31
202	Attendance	33
203	Release of Students and Student Information	36
204	Health Services	37
205	Student Records	38
206	Health and Wellness	39
207	Code of Conduct	41
208	Suspensions and Expulsions	42
209	Student Due Process	43
210	Sexual Harassment by Students	44
211	Harassment or Misconduct by Students	46
212	Searches	47
213	Student Debts for Loaned Instructional Equipment	48
214	Student Rights	49
300	Administrative Employees	
301	Employment of Head of School	51
302	Employment of Assistant Principal	52
303	Sexual Harassment or Sexual Misconduct	53
304	Sexual Harassment of Students by School Employees	54
305	Treatment of Students	56
306	Complaint Policy	57
307	Attendance Program	58
308	Sick Leave	59
309	Personal Leave	60
310	Vacation/Holidays	61

400	Professional Employees	
401	Employment of Substitute Professional Employees	62
402	Evaluation of Professional Employees	63
403	Drug and Alcohol Policy for Staff and Chaperones	65
404	Personnel Files	66
405	Rules of Procedure for Conducting Complaint Hearings	67
406	Salary Determination	70
407	Job-Related Expenses	71
408	Work Day	72
409	Uncompensated Leave	73
410	Attendance Program	74
411	Sick Leave	75
500	Classified Employees	
501	Employment of Classified Personnel	76
502	Employee Sexual Harassment or Sexual Misconduct	77
503	Sexual Harassment of Students by School Employee	78
600	Finances	
601	Preparation of Budget	80
602	Bank Accounts	81
603	External Bank Accounts	82
604	Purchases subject to Bid	83
605	Purchases not budgeted	84
606	Payroll Internal Control	85
607	Financial Audit- Public	89
608	P-Card Internal Control	90
700	Property	

ACADEMY OF DOVER CHARTER SCHOOL
Board Policy

701	Safety	93
702	Use of School Facilities	94
800	Operations	
801	School Organization	97
802	School Day	98
803	Food Services	99
804	Transportation	100
805	Bonding	101
806	Insurance	102
900	Community	
901	Public Relations Objective	103
902	Public Participation at Board Meetings	104
903	Public Attendance at School Events	105
904	Advisory Committees	106
905	Public Complaints	107
906	Freedom of Information Act (FOIA)	109
907	FERPA	113
908	Relations with Special Interest Groups	115
909	School and Community Notification and Monitoring Sex Offenders	116

000 LOCAL BOARD PROCEDURES

001 Name and Classification

The Board of Directors shall be known officially as the Board of Directors of the Academy of Dover Charter School, hereinafter sometimes referred to as the “Board”.

Address:

The official address of the Board of Directors is 104 Saulsbury Road, Dover, Delaware 19904.

000 LOCAL BOARD PROCEDURES

002 Board Procedures

The governing authority for the Academy of Dover is defined in Title 14, Chapter 5 of the Delaware Code. Additional authority and procedures are defined in Bylaws of the organization.

All meetings of the Board of Directors will be held in compliance with Title 29, Chapter 100 of the Delaware Code, titled Freedom of Information Act. All meetings of the Board will be held at the Academy of Dover Charter School. Agendas will be posted and minutes will be kept in compliance with §10004 of this Act.

The Board reserves the right to sit in executive session closed to the public when the majority of the members present and voting so vote. As required by law, the purpose for an executive session shall be set forth in the agenda. The Board may meet in executive session only for those purposes which the law recognizes.

The authority of the individual members of the Board is limited to participating in actions taken by the Board as a whole when legally in session. Board members shall not assume responsibilities of administrators or other staff members. The Board or staff shall not be bound in any way by any action taken or statements made by any individual Board member except when such statement or action is pursuant to specific instructions and official action taken by the Board.

Board members may serve as liaisons to committees or organizations for the purpose of reciprocal communication. These liaisons will be appointed by the President.

The Board will conduct all public meetings under the guidelines of Robert's Rules of Order.

Any Board member may request an item to be placed on the agenda for discussion by contacting the President at least 7 days in advance of the meeting, in order to comply with the agenda posting time frame established under the Freedom of Information Act.

All Board members will adhere to the Code of Ethics as defined in Board Policy #004.

000 LOCAL BOARD PROCEDURES

003 Membership

Membership on the Board of Directors shall be in compliance with the Bylaws of the Academy of Dover and the conditions set forth by the Secretary of Education of the State of Delaware.

000 LOCAL BOARD PROCEDURES

004 Board Code of Ethics

The Board of Directors recognizes its power to be a role model for fairness in school governance. To achieve maximum positive results, the following standards are set forth by the Academy of Dover Board of Directors:

1. As representatives of the school, all Board members shall conduct themselves at all times in a manner worthy of the constituents' trust.
2. Board members shall avoid conflicts of interest and shall not use Board membership for personal gain.
3. Board members shall strive to avoid the appearance of impropriety that can undermine the trust of the school community.
4. Board members shall operate executive sessions fully in accordance with and in the spirit intended by the Freedom of Information Act, maximizing the trust of the school community and maintaining required confidentiality.
5. A Board member shall make no attempt to take advantage of his/her position by soliciting unilateral action by the Head of School and other staff members.
6. Board members shall recognize that authority rests only with a quorum of the Board while holding a duly posted meeting, not with committees appointed by the Board as a whole or with individual Board members. As such, no member shall make any personal promise nor take any private action that might compromise the Board or restrict its options.
7. The Board recognizes that the best solutions and answers come after much discussion, deliberation, and disagreement, and it therefore recognizes the positive and negative aspects of such dissent. However, individual members shall refrain from public attacks and criticism of the character of another Board member.
8. Board members must explicitly and simultaneously state that they are expressing a personally held view when expressing a position or viewpoint in contradiction to established, public Board positions or actions.
9. Board members shall avail themselves to orientation opportunities and other board-related, information sharing opportunities.
10. New Board members will be provided an orientation to cover policies and procedures.

000 LOCAL BOARD PROCEDURES

005 Meetings

Each member of the Board is expected to attend Board meetings regularly.

The order of business shall include the following agenda items in the following order:

1. Call to Order
2. Pledge of Allegiance
3. Approval of Minutes
4. Formal Public Comment
5. Financial Reports
6. Approval of Financials
7. Head of School Report
8. Board Reports
9. Action Items
10. Personnel
11. Adjournment

The Board may enter into Executive Session to discuss items admissible under the Freedom of Information Act, DE Code, Title 29, Chapter 100.

000 LOCAL BOARD PROCEDURES

006 Conflict of Interest

Purpose

The purpose of this Conflict of Interest Policy is to protect Academy of Dover interest when it is contemplating entering into a transaction or arrangement that might or have the appearance of benefiting the private interest of an employee, official, or agent of the Organization or might or have the appearance of a result in a possible excess benefit transaction. This policy is intended to supplement not replace any applicable state or federal laws governing conflict of interest applicable to nonprofit and charitable organizations.

Definitions

1. Interested Person

Any director, principal officer, or member of a committee with governing board delegated powers, who has a direct or indirect financial interest, as defined below, is an interested person.

2. Financial Interest

A person has a financial interest if the person has, directly or indirectly, through business, investment, or family:

- a. An ownership or investment in any entity with which the Organization has a transaction or arrangement, or
- b. A compensation arrangement with the Organization or with any entity or individual with which the Organization has a transaction or arrangement, or
- c. A potential ownership or investment interest in, or compensation arrangement with, any entity or individual with which that Organization is negotiating a transaction or arrangement.

Compensation includes direct or indirect remuneration as well as gifts or favors that are not insubstantial.

A financial interest is not necessarily a conflict of interest. Under Article III, Section 2, a person who has a financial interest may have a conflict of interest only if the appropriate governing body or committee decides that a conflict of interest exists.

General Rule

No employee, officer, or agent shall participate in the selection, award, or administration of a contract supported by Organization funds if a real or apparent conflict of interest would be involved. Such a conflict of interest would arise when the employee, officer, or agent, or any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of the parties indicated herein, has a financial or other interest in the firm selected for an award.

The officers, employees, and agents of the Organization shall neither solicit nor accept gratuities, favors, or anything of monetary value from contractors, or parties to sub agreements. However, the Organization may set standards for situations in which the financial interest is not substantial or the gift is an unsolicited item of nominal value. The standards of conduct shall provide for

disciplinary actions to be applied for violations of such standards by officers, employers, or agents of the Organization.

Procedures

1. Duty to Disclose: In connection with any actual or possible conflict of interest, an interested person must disclose the existence of the financial interest and be given the opportunity to disclose all material facts to the directors and members of committees with governing board delegated powers considering the proposed transaction or arrangement.

2. Determining Whether a Conflict of Interest Exists: After disclosure of the financial interest and all material facts, and after any discussion with the interested person, he/she shall leave the board of directors meeting while the determination of a conflict of interest is discussed and voted upon. The remaining board or committee members shall decide if a conflict of interest exists.

3. Procedures for Addressing the Conflict of Interest:

a. An interested person may make a presentation at the board of directors meeting, but after the presentation, he/she shall leave the meeting during the discussion of, and the vote on, the transaction or arrangement involving the possible conflict of interest.

b. The Chair of the board of directors shall, if appropriate, appoint a disinterested person or committee to investigate alternatives to the proposed transaction or arrangement.

c. After exercising due diligence, the governing board or committee shall determine whether the Organization can obtain with reasonable efforts a more advantageous transaction or arrangement from a person or entity that would not give rise to a conflict of interest.

d. If a more advantageous transaction or arrangement is not possible under circumstances not producing a conflict of interest, the board of directors shall determine by a majority vote of the disinterested directors whether the transaction or arrangement is in the Organization's best interest, for its own benefit, and whether it is fair and reasonable. In conformity with the above determination it shall make its decision as to whether to enter into the transaction or arrangement.

4. Violations of the Conflicts of Interest Policy:

a. If the board of directors has reasonable cause to believe an employee, officer, director, or agent has failed to disclose actual or possible conflicts of interest, it shall inform the employee, officer, or director or agent an opportunity to explain the alleged failure to disclose.

b. If, after hearing the employee's, officer's, director's, or agent's response and after making further investigation as warranted by the circumstances, the board of directors determines the employee, officer, director, or agent has failed to disclose an actual or possible conflict of interest, it shall take appropriate disciplinary and corrective action.

Records of Proceedings

The minutes of the board of directors shall contain:

a. The names of the persons who disclosed or otherwise were found to have a financial interest in connection with an actual or possible conflict of interest, the nature of the financial interest, any

ACADEMY OF DOVER CHARTER SCHOOL

Board Policy

action taken to determine whether a conflict of interest was present, and the board of Directors decision as to whether a conflict of interest in fact existed.

b. The names of the persons who were present for discussions and votes relating to the transaction or arrangement, the content of the discussion, including any alternatives to the proposed transaction or arrangement, and a record of any votes taken in connection with the proceedings.

Compensation

a. A voting member of the board of directors who receives compensation, directly or indirectly, from the Organization for services is precluded from voting on matters pertaining to the member's compensation.

b. A voting member whose jurisdiction includes compensation matters and who receives compensation, directly or indirectly, from the Organization for services is precluded from voting on matters pertaining to that member's compensation.

c. No voting member of the board of directors whose jurisdiction includes compensation matters and who receives compensation, directly or indirectly, from the Organization, either individually or collectively, is prohibited from providing information to any committee regarding compensation.

Annual Statements

Each employee, officer, director or agent shall annually sign a statement which affirms such person:

A Has received a copy of the conflicts of interest policy,

B Has read and understands the policy,

C Understands the Organization is charitable and receives a substantial portion of its funds from the federal government and in order to maintain its federal tax exemption and receipt of federal funds, it must engage primarily in activities which accomplish one or more of its tax-exempt purposes and abide by federal rules for financial management.

Periodic Reviews

To ensure the Organization operates in a manner with charitable purposes and does not engage in activities that could jeopardize its tax-exempt status and receipt of federal funds, periodic reviews shall be conducted. The periodic reviews shall, at a minimum, include the following subjects:

A Whether compensation arrangements and benefits are reasonable, based on competent survey information, and the result of arm's length bargaining.

b. Whether partnerships, joint venture, and arrangements with management organizations conform to the Organization's written policies, are properly recorded, reflect reasonable investment or payments for goods and services, further charitable purposes and do not result in inurement, impermissible private benefit or in an excess benefit transaction.

Use of Outside Experts

ACADEMY OF DOVER CHARTER SCHOOL

Board Policy

When conducting the periodic reviews as provided for in Article VIII, the Organization may, but need not, use outside advisors. If outside experts are used, their use shall not relieve the board of directors of its responsibility for ensuring periodic reviews are conducted.

100 Programs

101 Philosophy

The philosophy of the Academy of Dover is presented in the Mission and Vision Statements.

Mission Statement:

Academy of Dover will serve as a community pillar for life-long learning, pride, and self-actualization. Looking to the past to prepare students for the future, the Academy of Dover will combine the beneficial rigors of a classical education with the latest technology and the best teaching and learning practices worldwide. The Academy of Dover student will cultivate and promote multi-cultural and global awareness. Students will be well prepared and encouraged to be entrepreneurs, well informed, and responsible world citizens with purpose, passion, and proficiency.

Vision Statement:

Academy of Dover believes that our small school environment, which is characterized by rigorous academic and behavioral standards, high expectations for students and staff, individualized responsiveness to student needs, and a never ending passion for learning, will prepare *each* of our students with the early foundation necessary to excel both academically and globally in any future endeavor.

100 Programs

102 Affirmative Action Policy

The Board is committed to a policy of nondiscrimination in relation to race, color, religion, sex, age, national origin, disability, marital status, or genetic information. This policy will prevail in all matters concerning staff, students, the public, educational programs and services, and individuals with whom the Board does business.

In keeping with the requirements of Federal and State Law, the Academy of Dover is committed to this policy in all areas related to employment, assignment and promotion of personnel; in educational opportunities and services offered to students, in student assignment to schools and classes, in discipline; in location and use of facilities; and in educational offerings and materials.

Any complaints related to discrimination should be directed to the Head of School.

100 Programs

103 Multicultural/Non-Discrimination Policy

Academy of Dover is committed to integrate all aspects of our diverse community into building an understanding and respect for all cultures and ethnicities. The district is committed to an educational environment that supports educational excellence regardless of race, gender, national origin, handicapping conditions, or religion. Equitable academic programs and services must respond to the needs and recognize the strengths of a culturally diverse school and community.

Academy of Dover supports diversity training for all employees as a way to expand and enhance tolerance and acceptance of all cultures and ethnicities.

Non-Discrimination Statement

It is the policy of the Board of Directors of the Academy of Dover (AOD) that no person shall, on the basis of race, color, creed, sex, national origin, age, or disability, be subjected to any discrimination prohibited by the Civil Rights Act of 1964, as amended; the Age Discrimination in Employment Act, as amended; American with Disabilities Act; Section 504 of the Rehabilitation Act of 1973; Title IX of the Educational Amendments of 1972; and other applicable laws, regulations, and Executive Orders. This policy applies to recruitment, employment, and subsequent placement, training, promotion, compensation, continuation, probation, discharge, and other terms and conditions of employment over which AOD has jurisdiction.

100 Programs

104 Resource Materials

Academy of Dover promotes the use of library materials in the school and the school library shall be guided by American Library Association standards.

100 Programs

105 Instructional Methods, Materials, and Supplies

Academy of Dover shall employ such instructional methods and materials as will allow for differences in individual capacities, interests, and abilities.

All materials should enrich and support the school curriculum and stimulate learning, satisfy curiosity, and encourage exploration of new fields of interest. In acquiring information, each student will be able to develop habits, skills, attitudes, interests, and appreciation which will prepare the student to live in a democratic society as a useful citizen in the community.

Books and Materials

When possible, all authorized books and instructional materials shall be furnished free to students.

1. Materials may be defined as printed material trade books, text books, general reference books, bibliographies, periodicals, pamphlets, and other media which are used to develop, support, and enrich the curriculum of the school and to provide for the personal needs of students and teachers.
2. Selection of materials because of changing and enlarging curriculum and the publishing of new materials is a continuous process. Therefore:
 - a. Materials shall be selected by qualified personnel of the school's curriculum team. Curricular needs shall be reviewed annually. Teachers and other staff members from the school will serve on curriculum teams by the Head of School's recommendations.
 - b. Selections shall be made by examination of material when possible and/or from recognized authoritative bibliographies or lists of materials recommended for the interest level involved.
3. Challenged and questioned materials: since opinions may differ in a democracy, the following procedures will be observed in recognizing those differences in an impartial and factual manner.
 - a. Citizens of the school community may register their criticism with the Head of School and shall be in writing. The statement shall include the specific information as required on the Request for Reconsideration of Library and Instructional Materials form.
 - b. The Head of School will chair and appoint a committee of school personnel to reevaluate the materials being questioned and to make recommendations.
 - i. The questioned materials shall be read and reevaluated by a committee composed of three certified personnel. The report of this committee shall be completed within 20 school days.

ACADEMY OF DOVER CHARTER SCHOOL
Board Policy

- ii. The Head of School may call in qualified citizens of the school community for consultation.
- iii. The Head of School's decision concerning the committee's recommendation shall be sent in writing to the complainant. Copies of the decision shall be sent to the committee members.

100 Programs

106 Technology Protection Measure and Internet Safety Policy

Technology is used at Academy of Dover to support teaching and learning. Users of the school's computers and networks are responsible for their actions. The use of technology in the school must be consistent with the academic goals of the school. Access to the technology is given to students who agree to act in a considerate manner and follow the school rules and the state of Delaware Acceptable Use Policy when using the system. Computer files and network storage areas will be treated as other school property. System administrators and school staff may monitor or review files and communications to maintain system integrity and to ensure responsible system use. Violations may result in the loss of access as well as other disciplinary or legal action.

Acceptable Uses of Technology for Students

- Using technology in the school in a manner consistent with the academic goals of the school.
- Accessing systems using only authorized usernames/passwords.

Unacceptable Uses of Technology for Students

May include, but are not limited to the following, which may result in disciplinary or legal action:

- Harassing, insulting, or attacking others
- Intentionally damaging computers, software, systems, or networks
- Revealing personal information or parent's personal information
- Sending or displaying messages/pictures that are offensive
- Using obscene or profound language
- Violating copyright laws
- Using the network for illegal or commercial purposes, including "hacking" and other unauthorized access
- Using or bypassing another person's username and password
- Trespassing in another's folder, work, or files

107 Special Education

Every exceptional student attending this school shall be offered an educational program that is appropriate for his/her individual needs and is suited to his/her unique abilities. Provisions shall be established for those school age children and youth who require special instruction, either in separate programs or within the regular classroom. These shall be in accordance with the Individuals with Disabilities Education Improvement Act, Part B, and Federal and State Regulations Governing Special Education.

100 Programs

108 Section 504

The purpose of Section 504 is to afford students who qualify with medical, cognitive, physical, behavioral and learning differences with equal opportunities to obtain the same results, to gain the same benefits, or to reach the same level of achievement as their peers. Academy of Dover believes that all students should have an equal opportunity to succeed. It is Academy of Dover's goal to provide reasonable accommodations for identified students. It is our mission to collaborate with parents/guardians to inform them of their rights under Section 504 and make decisions in the best interest of students.

The Law

Section 504 is a civil rights statute that prohibits discrimination against individuals with disabilities. This law is enforced by the Office for Civil Rights (OCR) and the EEOC (Equal Employment Opportunities Commission). Both agencies enforce Title II of the Americans with Disabilities Act of 1990 (ADA) reauthorized as the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. The reauthorization extends the prohibition against discrimination to the full range of state or local government services (including public schools), programs, or activities regardless of whether they receive federal funding or not.

Section 504 covers students with diagnosed, certified, or classified disabilities who attend public and some private schools. A student is "disabled" under the Section 504 regulations if the student meets any one of the three prongs of eligibility listed in 34 CFR 104.3(j)(1).

To be protected under Section 504, a student must be determined to:

- 1) Have a physical or mental impairment that substantially limits a major life activity or
- 2) Have a record of such impairment, or
- 3) Be regarded as having such impairment

100 Programs

109 Fund Raising

Any fund raising activities which benefit students or student groups and which may be legally construed as gambling, such as raffles, lotteries, and 50/50 drawings, must adhere to all state requirements and must be approved by the building administration. Students shall not directly or indirectly be involved in conducting or participating in such activities during school hours. Students may not purchase tickets related to said activities.

100 Programs

110 Field Trips

Educational field trips are considered to be an extension of the classroom. The educational values to be gained by taking field trips should be maximized by careful preplanning and appropriate follow up activities.

Whenever possible, school buses will be used for field trips. In all cases, written permission from the parents of children concerned shall be obtained for the specific trip.

In order for a field trip to be approved, the teacher shall submit a Field Trip Proposal listing all the following details of the desired trip.

1. Who/Where/When
2. Time (departure time and return time)
3. Cost per student and adult
4. Chaperone (plan)
5. Lunch plans
6. Appropriate attire
7. Transportation arrangements and costs (please consult with Ms. Stewart)
8. Nurse (must be present at all times with students off-site unless teacher has successfully completed medical training; fills out a separate form for parent consent)
9. Description and correlation to Delaware State Content Standards (CCSS for ELA and Math, NGSS for Science, DRC for Social Studies, etc.)
10. Itinerary/Planned activities
11. Expected Outcomes

100 Programs

111 Extracurricular Activities

The Board believes that the goals and objectives of the Academy of Dover are best achieved by a diversity of teaming experiences, some of which are more appropriately conducted outside the regular classroom curricular program of the school.

The Board will maintain a student activity program appropriate as varied as staff and facilities permit. The program will be designed to develop worthwhile skills.

The Board recognizes that extracurricular activities when properly planned and conducted in an appropriate, safe environment represent an essential part of the educational experience. The Board supports such extra classroom activities and will attempt to make them available on a voluntary basis to the students. It is the Board's goal to provide each student with a balanced program of academic studies and extracurricular activities to be determined by the school, the parents, and the students.

The following may be considered extracurricular activities:

- Band/Chorus
- Artistic productions
- Concert performances
- Theatre performances
- Special interest clubs
- Speech contests
- Dramatic contests

The Board will approve specific extracurricular activities through the authority of the Head of School in keeping with this policy and Board approved regulations.

100 Programs

112 Drug Free Workplace

Employees are well aware of the obvious dangers to them, their co-workers, customers and others, both inside and outside the workplace, and to the School in general from employee use or abuse of drugs and alcohol. Therefore, Academy of Dover is committed to establishing and maintaining an alcohol-free and drug-free workplace. In an effort to attain this goal, the School has adopted the following policy in connection with drugs and alcohol.

Academy of Dover will not tolerate drug or alcohol use or abuse of any kind on its premises, any work site, or travel to and from any work site. For the health and safety of every employee, staff may not use, purchase, sell, possess or be under the influence of alcohol or illegal drugs or any other controlled substances (other than prescription drugs) while engaged in work activities whether or not on School premises. If you are taking prescribed medication that, in any way, may affect your ability to work or to work safely, you should report the fact immediately to the Head of School. You also must provide a physician's note identifying the medication and its possible effects. While taking any prescription or other medication, you are responsible for being aware of any effect such medication may have on the performance of your job duties. The use of such medication will not be a mitigating factor in any disciplinary or remedial actions taken against you where you have failed to provide notice that your ability to perform the job safely and efficiently would be impaired.

Any employee reporting for work under the influence of alcohol, illegal drugs, or any controlled substance without advance notice, which could adversely affect job performance will be asked to leave immediately. Under these circumstances, assistance will be provided to ensure that the employee arrives home safely. Any employee who violates this policy or reports to work under the influence of alcohol or drugs may have his/her employment terminated immediately. Any employee having a reasonable basis to believe that another employee is in violation of this policy shall immediately report the facts and circumstances to the Head of School.

Reporting of Violations

1. All violations of this policy shall be reported to the appropriate police authority, the Board of Directors, the State Board of Education and the State Personnel Office. Personnel action shall be taken in all cases of a chargeable offense under 16 Del. C. Chapter 47, or comparable federal law. However, a conviction of the charged offense shall not be necessary in order to take independent personnel action against the employee for a violation of this policy. The employee against whom such a personnel action is taken be entitled to due process.
2. In the event an employee is convicted or pleads guilty to a violation of criminal law involving the use of drugs or alcohol in, on or off school property but within the school

ACADEMY OF DOVER CHARTER SCHOOL
Board Policy

environment as defined in III. A. 6., the employee shall notify the Head of School of the occurrence, in writing, within five (5) days following the conviction, or in the case of a first offender's program, of a conditional discharge plea. Within ten (10) days thereafter, the employee shall be subjected to discipline as provided in this policy.

100 Programs

113 Smoke Free Facility

Recognizing that smoking is both a safety and health hazard, it shall be the policy of the Academy of Dover to prohibit smoking by all persons within the buildings, facilities, and school grounds of the Academy of Dover.

It will be the responsibility of all Academy of Dover personnel to enforce the smoke-free policy.

100 Programs

114 Monitoring and Reporting Employee Attendance

The Academy of Dover relies upon its employees to be present each school day. Regular work attendance is necessary to adequately perform job responsibilities and is a component of an overall satisfactory or better job performance.

Absences for school personnel must be accurately recorded each payroll period during the school year throughout the standard payroll reporting procedure. All personnel should carefully review the rules and procedures that apply to them regarding absences. These rules are found in Delaware Code 1318.

The Head of School shall continuously monitor the attendance records of all employees.

If it is determined that an employee has exceeded his/her leave benefits, disciplinary action may be initiated by the Head of School.

Those who abuse their established leave benefits and/or allocations will have their salary reduced accordingly. Harsher disciplinary measures, including job termination, may be taken depending upon the situation and frequency of the occurrences.

100 Programs

115 Job Abandonment

An employee who is absent for three (3) consecutive work days and fails to notify the Head of School within three days, shall receive notice of intent to terminate. Such an employee may avoid termination by convincing the Head of School that compelling or extenuating circumstances existed that prevented him/her from providing the appropriate notification of the absences. The notice of intent to terminate shall identify the employee's opportunity to be heard and the procedure for requesting and conducting a hearing. The notice shall be sent via regular and certified mail to the employee's last known address.

200 Pupils

201 School Choice

The Delaware School Choice Program began in the 1996-1997 School Year. The law addressing School Choice is found in 14 Del. C Chapter 4. A parent residing within the State of Delaware may seek to enroll that parent's child in a Delaware public school in any school district, charter school, magnet school or vocational-technical school through the standard application form. Any student not currently registered in a public school in the State of Delaware must be registered in their School of Residence before submitting a standard application form. *Remove this*

Each receiving local education agency shall adopt and make available a policy regarding the order in which applications for enrollment shall be considered and the criteria by which such applications shall be evaluated for approval or disapproval pursuant to Title 14 § 405. The receiving district's policy shall seek to eliminate discrimination against choice students by: (1) allowing the receiving district to request supplemental application information from choice students only to the extent it requires the same information from attendance zone (resident school) students; (2) limiting the supplemental criteria a receiving district may use to evaluate choice applications—after that, receiving local education agencies must use a lottery system; and (3) removing the provision that allows a receiving local education agency to reject applications of students with special needs.

Enrollment Process

1. Academy of Dover will advertise the **enrollment period** for all grades beginning on or after the first Monday in November and continue until the end of January for enrollment during the following school year. Should Academy of Dover reach the maximum number of 300 as per our charter agreement, students will be put on a waiting list. In the condition that the maximum number has not been reached, Academy of Dover will conditionally admit all students who apply in the order they are received.
2. In the event of a waiting list, preference will be given in the following order:
 - Children of Board members
 - Siblings of students already enrolled
 - Children of employees at the Academy of Dover
 - New Students
3. The intent of the sibling preference law is to keep families together.
SIBLING by definition is a:
 - A. Biological/adoptive sibling
 - B. Stepsiblings residing in the same household.
 - C. Foster children residing within the same household

ACADEMY OF DOVER CHARTER SCHOOL
Board Policy

- D. Stepsiblings living in different households are not considered for a sibling preference.
4. Applications for enrollment are good for one year. Students do not need to be re-enrolled every year. Students being enrolled for the first time must sign and agree to the "One Year Charter Agreement" as described in Title 14 of the Charter School Law.
 5. Applications may be picked up from the Main Office during the enrollment period or thereafter.
 6. Students applying for Kindergarten do not necessarily have to be currently enrolled in a pre-K program. A birth certificate showing that the child will turn five-years old by August 31st within the year at the start of Kindergarten will be required during the registration process in order for the student to be officially accepted.

200 Pupils

202 Attendance

The Code of Delaware requires that every person having control of a child between the ages of five and sixteen shall send such child to school each day that school is in session. The Code further acknowledges that there are instances when a child's absence is not an illegal act by either the child or the person in control of the child. However, it is clearly the expectation of the State of Delaware that children enrolled in school shall be in regular attendance.

The Board of Directors expects those in control of students enrolled in the Academy of Dover be responsible for regular and punctual patterns of attendance and such is expected of all enrolled students.

The Board recognizes that occasionally there is a need for students to not be in attendance during school hours. Every minute of instructional time is important. Each minute lost cannot be regained. Parents are reminded to limit absences, late arrivals and early dismissals. **The official instructional time for school is 8:15-3:10.**

The Head of School is charged with maintaining a comprehensive system of attendance records. Classroom teachers are to maintain an accurate record of student attendance, absence, and tardiness.

The Board classifies absence from school as either "excused" or "unexcused."

Students who are absent or tardy from school are responsible for school work missed. It is the student's responsibility to take advantage of opportunities provided by the teacher to make up work. The student's grades could reflect failure to make up work missed as a result of absence or tardiness. It is the responsibility of the person in control of a child to send a note to the school on the first day of return from an absence of three or fewer days describing the reason that caused the student to miss instructional time. Absence for three or more consecutive days requires a doctor note.

The following conditions are recognized as "excused" absences:

- Absences associated with student illness
- Absence associated with a family emergency
- Absence associated with a religious holiday
- Absence associated with a subpoenaed court appearance
- Absence associated with an appointment for treatment by a doctor or dentist
- Absence associated with other reasons pre-approved by the HOS. (Educational family trip, child/parent court ordered meeting, etc.)
- Absence associated with suspension.

The following are recognized as 'unexcused' absences:

- Absences for which no written note was provided
- Absences for more than three days for which a note from a doctor was not provided
- Absences not listed as "excused."

ACADEMY OF DOVER CHARTER SCHOOL
Board Policy

Being prompt to school goes hand-in-hand with a responsible attendance record. Tardiness can affect student performance. Tardiness that results in a student arriving to class after twelve noon or an early pick up that occurs before twelve noon will be counted as an absence.

A student who is absent from school for unexcused reasons a total of **ten (10) days** will be referred to truancy court. Warning letters will be sent home to the guardians when the child reaches five (5) unexcused absences.

Consistent attendance is the key to a great education. We rely so heavily on parents and guardians to send students to school and to instill in them the importance of not just coming every day, but coming to school prepared with materials, dressed properly and with learning in mind. Because this is such an important issue, the following policies and guidelines have been put in place:

******Three or more absences due to illness require a written excuse signed by a health care professional in order for the student to return to school.

******* Families with excessive absences will be referred to Truancy Court.

******** A student who has unexcused absences totaling 20 or more days will be subject to mandatory retention. No Exceptions. Please note: 20 days of school missed throughout the year is equivalent to one (1) month of instructional time missed.

Methods of Determining Excused Absences

The method of determining excused and unexcused absences shall be left to the discretion of the Chief Administrative Officer or designee. The following are generally accepted:

- a. Doctor's note for sickness.
- b. Dentists note for treatment.
- c. Parent/guardian note to match a bona fide signature.*

* All absences totaling three (3) consecutive days or more require a doctor's note on office letterhead.

** Dental and medical appointments scheduled after school hours are more desirable, but the administration will make concessions if appointments must fall during regular school hours. Children should return to school following such appointments if there is time remaining.

Make Up Work

1. Students who had an **excused** absence by the terms outlined above, will have one day to make up work for each day absent. For example, a student absent 2 days will have 2 days to make up work. Any work not made up during the time allowed without prior arrangements will receive a zero (0).
2. Students with extended absences or hospital stays will be given appropriate time, to be determined on an individual basis.
3. Students with an **unexcused** absence will need a parent or doctor's note explaining the reason for the absence prior to making up the work.

Tardiness

1. Students are considered tardy to class or homeroom when they report after the published starting time.
2. Students must be in their classroom by 8:15 AM or they will be considered late.
3. A written explanation is required for each tardy.
4. Tardy students must be signed in by an adult not simply dropped off.
5. Students with consistent and/or excessive tardies may be referred to truancy court and will be asked to meet with the Head of School regarding the issue.

200 Pupils

203 Release of Students and Student Information

In the interest of the Safety of students in the Academy of Dover, we will adhere to the following guidelines for releasing of students and correspondences.

Releasing Students

A child may be picked up from school by a parent/guardian or by another authorized adult whose name must have been submitted on the school's Emergency Contact sheet prior to the day of release. A photo identification must be presented upon request.

Correspondence

Report cards, test scores, and other correspondences regarding the child will be sent to the legal guardian. Upon the written request of a child's parent, the school can share information with another authorized adult.

In all formal documentation, the child will be referred to by the name indicated on the birth certificate. Name changes will only be granted with appropriate court documentation.

Academy of Dover will follow all court documentation regarding custody, DSF court orders, etc.

200 Pupils

204 Health Services

The Board of Directors recognizes the importance of student health services and the integration of those services into the total school program. Licensed health care providers employed by the school shall practice according to their professional practice as well as policies developed by the school and the State of Delaware.

200 Pupils

205 Student Records

The school shall maintain a cumulative case history of each pupil in the school from the time that the pupil is enrolled. Upon the student leaving the school, all records will be sent to the new school upon request of student records.

200 Pupils

206 Health and Wellness

The Academy of Dover Board of Directors believe that student's health and wellness play vital roles in their academic and social development. To this end, the Board recognizes the importance of the school's coordinated health and physical education program and the school's child nutrition program in helping students make healthy choices and avoid behaviors that can harm their health and well-being.

Health Education

The school's health program shall be designed to incorporate the following;

1. A school environment that is safe, that is physically, socially, and psychologically healthy, and that promotes health-enhancing behaviors.
2. Teaching all students the essential knowledge and skills needed to become health literate, to make healthy choices while avoiding behaviors that can damage their health and well-being.
3. A sequential, age appropriate health education, physical education, and nutrition instruction curriculum that is integrated with other areas of study as appropriate and is designed to motivate and help students maintain and improve their health.
4. Food service activities that are coordinated with the school's nutrition education curriculum.
5. School health services that are designed to ensure access and/or referral to primary health care service, foster appropriate use of health care services, prevent and control communicable disease and other health problems, and provide emergency care for illness or injury.
6. Counseling, psychological, and social services that are designed to ensure access and/or referral to assessments, interventions, and other services for student's mental, emotional and social health.

Physical Education

The school will offer physical education classes consistent with Delaware Standards by maintaining a physical education program that includes:

1. Building knowledge and skills for the enjoyment of life long physical activity
2. Creating a positive atmosphere for all students to participate in physical activity
3. Enhancing skills in leadership, teamwork, and self confidence
4. Utilizing technology within the curriculum to enhance motivation and participation

ACADEMY OF DOVER CHARTER SCHOOL
Board Policy

Suitable adapted physical education shall be included as part of individual education plans for students with chronic illnesses, other disabling conditions, or special needs that preclude such students' participation in regular physical activities or instruction.

In addition to required physical education, students at the elementary level should have the opportunity to participate in daily recess.

Students should not be excluded from participating in physical education classes or opportunities for physical activities as a consequence for disciplinary infractions, nor should physical activity be used as a disciplinary measure.

Child Nutrition Programs

The Academy of Dover will operate the USDA Federal Breakfast and Lunch Program.

As required for participation in the Child Nutrition Program, the Board prescribes that;

1. School lunch is to be made available to all students.
2. Free and reduced price lunches are to be made available for students who meet the federal income guidelines.

200 Pupils

207 Code of Conduct

The Academy of Dover Board of Directors believes that, in order for students to learn to the best of their abilities, they must be in an orderly, respectful environment. The school will adhere to the code of conduct as found in the Student/Parent Handbook.

The Board of Directors requires that the Student/Parent Handbook be reviewed each year for necessary revisions and must be approved by the Board prior to being implemented.

200 Pupils

208 Suspensions and Expulsions

The Board recognizes that exclusion from the educational program of the school, whether by suspension or expulsion, is the most severe that can be imposed on a student in this school and one that cannot be imposed without due process.

Suspensions

The primary purpose of suspension of a pupil is to allow adequate time for proper investigation of the given situation followed by a conference with parents and pupil, when appropriate. Student suspensions will take effect no more than two school days from the time of a violation.

Expulsions

Only the Board may expel a student from school. In general, the act of expulsion shall be taken in accordance with due process rights and on the documented evidence presented by the administration. A student will be expelled for not more than 180 days. Expelled students may be offered the opportunity to earn credit through alternative programming.

200 Pupils

209 Student Due Process

Every student is entitled to the right to receive an education. However, education itself is a privilege gained by those responsible individuals who reflect the behavior and attitudes which are beneficial in obtaining a quality education. There are times when disciplinary measures become necessary in order to modify or change behavior and are not to be considered or serve as punishment. In the attempt to modify behavior, those acts that are recognized as unacceptable behavior, must be communicated to the concerned and involved parties. Each student is entitled to due process according to set procedures which must be followed. These procedures include:

1. Student must have prior knowledge of the conduct which is prohibited.
2. Student must be aware of specific infractions which give rise to any proposed penalties or discipline.
3. Student must have the opportunity to express or convey to the proper authority, views or rebuttal regarding the incident.
4. The decision making authority must base the outcome on the incidents, or matters about which the student has been apprised as indicated.

200 Pupils

210 Sexual Harassment by Students

The AOD Board of Directors believes that all persons are entitled to a safe school environment where individual rights are respected and protected, where all persons are free from intimidation, discrimination, and acts of violence, and where understanding and tolerance of individual differences are encouraged. As part of the districts efforts to foster such a learning environment and in accordance with state and federal law, the following policy on sexual harassment has been adopted.

Sexual harassment is a form of sex discrimination that violates the Delaware Discrimination in Employment Act (DDEA). It applies to employers with 4 or more employees, including state and local governments. It also applies to employment agencies and to labor organizations.

Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature constitute sexual harassment when this conduct explicitly or implicitly affects an individual's employment, unreasonably interferes with an individual's work performance, or creates an intimidating, hostile, or offensive work environment.

Sexual harassment can occur in a variety of circumstances, including but not limited to the following:

- The victim as well as the harasser may be a woman or a man. The victim does not have to be of the opposite sex nor is the person's sexual orientation a determining factor.
- The harasser can be the victim's supervisor, an agent of the employer, a supervisor in another area, a co-worker, or a non-employee.
- The victim does not have to be the person harassed but could be anyone affected by the offensive conduct.
- Unlawful sexual harassment may occur without economic injury to or discharge of the victim.
- The harasser's conduct must be unwelcome.

It is helpful for the victim to inform the harasser directly that the conduct is unwelcome and must stop. The victim should use any employer complaint mechanism or grievance system available. When investigating allegations of sexual harassment, DDOL looks at the whole record: the circumstances, such as the nature of the sexual advances, and the context in which the alleged incidents occurred. A determination on the allegations is made from the facts on a case-by-case basis.

ACADEMY OF DOVER CHARTER SCHOOL
Board Policy

Prevention is the best tool to eliminate sexual harassment in the workplace. Employers are encouraged to take steps necessary to prevent sexual harassment from occurring. They should clearly communicate to employees that sexual harassment will not be tolerated. They can do so by providing sexual harassment training to their employees and by establishing an effective complaint or grievance process and taking immediate and appropriate action when an employee complains.

It is also unlawful to retaliate against an individual for opposing employment practices that discriminate based on sex or for filing a discrimination charge, testifying, or participating in any way in an investigation, proceeding, or litigation under the DDEA.

A student that is found to have committed sexual harassment toward another student or staff member will be subject to disciplinary action. All reports of sexual harassment will be actively and diligently investigated, and appropriate action will be taken consistent with the provisions of the student disciplinary code and/or state law. The type of disciplinary action taken will depend upon the seriousness of the offense committed and may include the giving of a reprimand or warning, the placing of the offending student on probation, suspension, expulsion, or the imposing of other disciplinary alternatives.

200 Pupils

211 Harassment or Misconduct by Students

Harassment or misconduct that is based upon a person's race, national origin, disability, religion, sexual orientation, or similar characteristics by a student directed against or toward another person that occurs on the school premises is a form of conduct which is prohibited.

Such harassment or misconduct shall include, but is not limited to the following:

- Any assault, offensive touching, menacing, or reckless endangering of another person that is motivated by the victims race, national origin, disability, religion, sexual orientation, or similar characteristic.
- Oral or written words communicated by any student to another that attack, degrade, stereotype, or offend based on the person's race, national origin, disability, religion, sexual orientation, or similar characteristic.
- Any oral, written, or symbolic communication that can reasonably be perceived and considered as offensive, including slurs, jokes with negative connotations, apparel decorated with negative or degrading words or symbols, negative stereotyping, or other communications that are based upon race, national origin, disability, religion, sexual orientation, or similar characteristic.
- The use of threats, coercion, or intimidation to prevent a person from reporting such harassment or misconduct as previously set forth.

If it is believed that an act of harassment or misconduct has occurred, the circumstances should be reported immediately to any employee of the school who is in a position of authority.

A student that is found to have committed harassment or misconduct will be subject to disciplinary action. All reports of sexual harassment will be actively and diligently investigated, and appropriate action will be taken consistent with the provisions of the student disciplinary code and/or state law. The type of disciplinary action taken will depend upon the seriousness of the offense committed and may include the giving of a reprimand or warning, the placing of the offending student on probation, suspension, expulsion, or the imposing of other disciplinary alternatives.

200 Pupils

212 Searches

Search and Seizure

Students shall be free from unreasonable search and seizure. This right is balanced by the school's responsibility to protect the health, safety and welfare of others. Searches of a student's person and/or personal property may be made when there is reasonable suspicion that the student possesses any item or substance which could pose a danger to the health, safety, or welfare of others or possesses any items acquired illegally or improperly.

Personal Storage

The school presumes a student possesses and it, therefore, responsible for all items found in/on the students clothing, book bag, purse, or similar bag or container used to carry books or personal property. Students should regularly check the contents of their personal storage containers. If they fail to secure their personal storage, or provide others access to them, they remain responsible for items found in their personal storage containers.

200 Pupils

213 Student Debts for Loaned Instructional Equipment and Materials

All students have the responsibility to return assigned textbooks and other loaned school materials on time and in good condition. These materials are purchased by the school for student use for a period of time, and it is the responsibility of all students to take reasonable care of the materials so other students may be able to benefit from their used in the future.

The school must be properly reimbursed for all lost and damaged materials. The school is responsible for monitoring outstanding debts. The parent or guardian of each student is responsible to work with the school to clear accounts before the end of each school year. If the parent or guardian refuse to work with the school or refuses to pay, the school may consider disciplinary action. Action could result in the school withholding student participation in all extracurricular activities, summer school, or other school sponsored activities. Other disciplinary actions may be considered by the school as appropriate. The school is expected to work cooperatively with parents in every way possible to clear outstanding student debts.

200 Pupils

214 Student Rights

Freedom of Expression and Communication

The rights and responsibilities of students regarding freedom of speech, press, and action shall be in conformity with the safeguards established in the First Amendment to the United States Constitution and as interpreted and applied through decisions of the various courts. The following principles shall serve as guidelines in respect to freedom of expression:

1. Students shall be free to express views and opinions provided they do not seek to coerce others to follow their mode of expression or interfere with the free expression rights of others during school hours.
2. Students shall be permitted to discuss and express all views relevant to the subject matter in the classroom, limited only to the responsibility of the teacher to maintain order, to assure meaningful participation and to respect the contributions of all students.
 - a. Students are, however, responsible for learning the content of the subjects for which they have been scheduled.
 - b. They are further responsible for meeting the performance standards of the subjects as established by the teachers and school officials. Requirements of class attendance, participation, and the submission of written assignments, are important aspects of student responsibilities.
 - c. Evaluation of student performance shall only be related to the achievement of the subject matter content, the understanding of processes, and the development may not be imposed as a result of student actions outside of the subject matter study.
3. Students shall have the right to express themselves through dialect and symbolic means as long as such expression
 - a. Does not mock, demean, or ridicule other person or groups
 - b. Does not interfere with the scheduled activities or disrupt the educational process within the school
 - c. Does not reflect obscenity, vulgarity and inflammatory statements.
4. Students shall have the right to publish and distribute materials as long as such action of material
 - a. Does not endanger the health or safety of students
 - b. Does not threaten to disrupt the educational process
 - c. Does not reflect a libelous nature
 - d. Does not indicate a commercial purpose
 - e. Does not contain obscene and inflammatory statements
 - f. Does not involve an unauthorized use of district funds and materials
 - g. Does not indicate a malicious statement

Cell Phones

Students may possess a cell phone on school property under the following conditions:

1. During the school day the device must be turned off and out of sight. Students may not use the device until after officially dismissed from school.
2. Cell phones are not to be used on the school bus or buses used for field trips
3. Cell phones may be used after the official dismissal at the end of instructional day and at the conclusion of school activities.

300 Administrative Employees

301 Employment of Head of School

In order for an educational system to function for the best interest of the students, it is important that staff be assigned to best meet the needs of a position. The Board places the primary responsibility and authority for the administration of this school in the Head of School. Selection of a Head of School is, therefore, critical to the effective management of the school.

The Board shall select and employ the Head of School who will also serve as secretary of the Board.

The salary of the Head of School shall be fixed by the Board, and there shall be provision for expenses incurred in the performance of his/her duties as approved by the Board of Directors.

300 Administrative Employees

302 Employment of Assistant Principal

In order for an educational system to function for the best interest of the students, it is important that the staff be assigned to best meet the needs of a position. The Board places the secondary responsibility and authority for the administration of this school in the Assistant Principal. Selection of an Assistant Principal is, therefore, critical to the effective management of the district.

The Head of School shall select and employ the Assistant Principal of the school with approval from the Board.

The salary of the Assistant Principal shall be fixed by the Head of School and/or the Board. There shall be provisions for expenses incurred in the performance of his/her duties as approved by the Board.

300 Administrative Employees

303 Sexual Harassment or Sexual Misconduct

Sexual harassment is a form of employee misconduct which is not tolerated within the offices, school or upon the grounds of the Academy of Dover. Sexual harassment includes unwelcome verbal or physical sexual advances or conduct of a sexual nature, sexually explicit or derogatory statements, or sexually discriminatory remarks made by someone in the work place. If you believe you are the subject of sexual harassment or are aware of an instance of sexual harassment, you should report the circumstances immediately to the Head of School or to the President of the Board.

No one will in any way use threats, coercion, or intimidation to deter an employee from reporting sexual harassment.

Upon notification to the Head of School or the Board President, an investigation of the complaint will be conducted immediately. Confidentiality of the complainant and/or witnesses to the alleged sexual harassment will be maintained to the fullest extent possible. If the circumstances warrant such action, the complainant and/or the alleged harasser may be placed on administrative leave pending completion of the investigation.

An employee found to have committed sexual harassment will be subject to disciplinary action. The type of disciplinary action taken will depend upon the seriousness of the offense committed and may include the giving of a reprimand or warning, placement on probation, suspension with or without pay, and/or termination of employment. Other remedial action may be taken, as appropriate. Employees who witness sexual harassment and do not report the harassment as indicated above may also be subject to disciplinary action.

Follow up inquiries may be made to ensure that sexual harassment has not resumed and that the complainant and witnesses have not suffered retaliation for their actions.

300 Administrative Employees

304 Sexual Harassment of Students by School Employees

The Academy of Dover Board of Directors believes that all persons are entitled to a safe school environment where individual rights are respected and protected, where all persons are free from intimidation, discrimination, and acts of violence, and where understanding and tolerance of individual differences are encouraged. As part of the districts efforts to foster such a learning environment and in accordance with state and federal law, the following policy on sexual harassment has been adopted.

It is important to remember that no person deserves to have his/her individual freedoms violated and that persons who have experienced sexual harassment often feel guilty, angry, powerless, and fearful.

The following are examples of some types of actions that may constitute sexual harassment, whether the harasser is another student or adult;

- Written contact: suggestive or obscene letters, notes, invitations, graffiti, and electronic messages of a sexual nature.
- Visual contact: suggestive looks or gestures, displaying sexually suggestive or explicit objects or pictures, cartoons, photographs, electronic images, posters, magazines, or other materials.
- Verbal contact: sexually suggestive gestures or obscene comments including, but not limited to, those about a person's body, body parts, or sexual characteristics that are used in a negative or embarrassing way; verbal advances or sexually explicit statements which may take the form of threats, jokes, teasing, phone calls, or pressure for sexual contact or favors.
- Physical contact: uninvited and intentional touching, blocking, or cornering, of a person's freedom of movement; pinching, patting, invasion of the persons privacy by leaning over him/her or brushing up against the other person's body; or actual sexual contact, assault, or rape.
- Retaliation: any action taken or threatened against another person for complaining about any of the behaviors described above.

If you believe you are the subject of sexual harassment or if you become aware of an instance of sexual harassment, the circumstances should be to report immediately to a teacher, parent/guardian, or to any employee of the school who is in a position of authority.

ACADEMY OF DOVER CHARTER SCHOOL
Board Policy

Persons are urged to report violations of this policy and no one will in any way, use threats, coercion, or intimidation to prevent a person from reporting sexual harassment. All complaints made to the school staff must be reported by such staff to the administration.

Upon receiving notice of a complaint of sexual harassment concerning a school employee, an investigation will be conducted as soon as possible. Confidentiality of the person and/or witnesses will be maintained to the fullest extent possible. A school employee who is found to have committed sexual harassment towards a students will be subject to disciplinary action; all reports of sexual harassment will be actively and diligently investigated, and appropriate action will be taken consistent with the provisions of existing collective bargaining agreements and/or state law. The type of disciplinary action taken will depend upon the seriousness of the offense committed and may include the giving of a reprimand or warning, placement on probation, suspension with or without pay, and/or termination of employment. Other remedial action may be taken, as appropriate.

300 Administrative Employees

305 Treatment of Students

The Academy of Dover Board of Directors believes that all persons are entitled to a safe school environment where individual rights are respected and protected, where all persons are free from intimidation, discrimination, and acts of violence, and where understanding and tolerance of individual differences are encouraged. Students and staff may expect that no one will be allowed to refer to them through action or remark in a demeaning, degrading, or derogatory manner either within the school or at school activities.

The Board specifically prohibits any kind of hazing. "Hazing" means any action or situation which recklessly or intentionally endangers the mental or physical health or safety of a student for the purpose of initiation or admission into, affiliation with, or as a condition for continued membership in any organization. The term shall include, but not limited to, any brutality of a physical nature, such as whipping, beating, forced calisthenics, exposure to the elements, forced consumption of any food or other substance, or any other forced physical activity that could adversely affect the physical health and safety of the individual, and shall include any activity which would subject the individual to extreme mental stress, such as forced exclusion from social contact, coerced conduct which could result in embarrassment, or any other forced activity which could adversely affect the mental health or dignity of the individual.

Staff members witnessing any activity that could be interpreted as hazing must immediately report the activity to the administration.

300 Administrative Employees

306 Complaint Policy

Effective management of school affairs requires reasonable and effective means of resolving difficulties which may arise among employees. To reduce potential areas of disagreement, and to establish and maintain recognized two-way channels of communication between the Board and management, this policy is established.

It is the intent of this policy that complaints be resolved at the lowest level and in the most informal manner possible. All school personnel who wish to register a complaint must first express such complaint to the Head of School. A complaint, to be considered under this procedure, must be initiated within ten school days from the time when the employee knew or should have known of its occurrence.

If the employee is not satisfied with the disposition of the problem through informal procedure; he/she must submit the complaint in writing to the Head of School, as applicable. The complaint will specify:

1. Nature of complaint
2. Specific problem or part of the problem still unresolved
3. Remedy sought

The Head of School will respond in writing within five school days of receiving the written complaint.

An employee may appeal a written decision made by the Head of School within ten school days to the Board. The appeal will state:

1. Nature of complaint
2. Head of School's response
3. Specific problem or part of the problem still unresolved
4. Remedy sought

Any appeal submitted to the Head of School will be presented to the Board by the next regular meeting. Within thirty days, the Board will then either render a decision, request additional information, or establish a date for the hearing. The complainant will be notified in writing of the disposition of the matter.

300 Administrative Employees

307 Attendance Program

Each professional and support staff member serves as a vital link to an improved education for students. That link is broken when a single staff member is absent from school. As a result, the ability to provide a thorough and efficient education is weakened. The Board recognizes that a reasonable amount of absence due to bona fide sickness or emergency situations is often beyond the control of staff. On the other hand, it believes that the school is entitled to a reasonable degree of regularity in the attendance of its staff in order to help realize the purposes and mission of the school.

Records of Absence:

The Board shall cause an accurate record of the absences from duty and reasons therefore of all employees for whatsoever reason to be kept, and may require a statement from the employee when absent from illness to the effect that he or she was unable to perform his or her duties during the period of absence. A physician's certificate may be required of personnel.

Deduction for Unexcused Absence:

For each days absent for reasons other than those permitted by state law, there shall be deducted 1/200th of the annual salary of the employee for each day of unexcused absence.

300 Administrative Employees

308 Sick Leave

This sick leave policy for administrative employees is to ensure that such employees will receive no less than the minimum sick leave provided under law. Such policy shall be in accordance with the following guidelines.

Sick leave for all employees shall accumulate in accordance with state law.

Administrators and other school employees who are considered 10 month employees shall be allowed ten (10) days sick leave per year with full pay; those administrators and other school employees employed 12 months a year shall receive twelve (12) days of sick leave per year with full pay.

The Board, or designee, shall keep an accurate record of the absences from duty and reasons therefore of all employees for whatsoever reason, and may require a statement from the employee when absent because of illness to the effect that she/he was unable to perform his/her duties during the period of absence. A physician's certificate may be required of personnel.

300 Administrative Employees

309 Personal Necessity Leave

This policy shall provide for administrative employees absence for personal necessity when not otherwise covered by sick leave or disability policies.

Excused absences shall be for the following reasons:

1. In the case of a death in the immediate family of the employee for an absence not to exceed 5 working days. Members of the immediate family shall be defined as father, mother, grandfather, grandmother, brother/sister, brother/sister in law, son/daughter, husband/wife, parent in law, daughter/son in law, or any relative who resides in the same household, or any person with whom the employee has made his/her home. This absence shall be in addition to other leaves granted to the employee.
2. In the case of critical illness in the immediate family as described above, an employee may be absent without loss of pay for a period of 3 calendar days per critical illness. The days so lost are to be counted against the sick leave of the employee.
3. In the case of the death of a near relative, there shall be no deduction in salary of the employee for absence the day of the funeral. A near relative shall be defined as first cousin, aunt, uncle, niece, or nephew. This absence shall be in addition to other leaves granted to the employee.
4. In the case of the observance of recognized religious holidays, an employee may be absent without loss of pay on no more than 3 days per year. The days so lost are to be counted as sick leave of the employee.
5. Employees are permitted to be absent up to 3 days per year for personal days. Such absence shall be counted against sick leave of the employee.
6. Any absence other than provided by State Law or Board policy shall be considered unexcused and subject to payroll deduction.
7. Letters of reprimand will be sent to employees taking unexcused leave without pay. An unexcused absence will be considered an act of insubordination and shall be reported to the Board to determine if further action is necessary.

300 Administrative Employees

310 Vacation/Holidays

Administrative employees shall be provided vacations in accordance with the following guidelines:

Twelve month employees will earn 1 2/3 (15 days) days of vacation per month of employment.

The following holidays will be provided and will not count against an employee's vacation time:

- Fourth of July
- Labor Day
- Election Day (Presidential Election years)
- Thanksgiving Day
- Friday after Thanksgiving
- Christmas Eve
- Christmas Day
- New Year's Eve
- New Year's Day
- MLK Day
- Good Friday
- Memorial Day

Only vacation time that has been earned may be taken without penalty. Vacation time will not be approved against future vacation credit.

Persons entering upon duties on or before the 15th of a month will receive full vacation credit for that month. Persons entering upon duties after the 15th of a month will receive no credit for that month. Resignations effective on or before the 15th of a month will receive no credit for that month. Resignations effective after the 15th of a month will receive full credit.

By Delaware Law, the maximum number of earned vacation days that may be carried over from one fiscal year to the next fiscal year (June 30-July 1) is forty-two (42) days. Earned carryover time will automatically be carried over for employees with earned vacation time from one fiscal year to the next up to 42 days. Earned vacation time in excess of 42 days credited to individuals as of June 30 of any year will be deleted at that time.

400 Professional Employees

401 Employment of Substitute Professional Employees

Cumulative Term Substitute

A cumulative term substitute is defined as a person who has worked a minimum of 50 days during the current school year in various assignments.

Starting on the fifty-first day of service within one school year, the individual will be paid 1.15 (15%) times the per diem rate for his/her classification. The 15% increase will be honored the remainder of the school year and terminates on June 30.

400 Professional Employees

402 Evaluation of Professional Employees

Performance of teachers is evaluated through the Delaware Performance Appraisal System (DPAS II). As a statewide system, DPAS II establishes consistent educator and student performance expectations and outcomes across all schools. There are three versions of DPAS II:

1. DPAS II for Teachers
2. DPAS II for Specialists
3. DPAS II for Administrators

The three main purposes of DPAS II are to assure and support:

1. Educators' professional growth
2. Continuous improvement of student outcomes
3. Quality educators in every school building and classroom

DPAS II for Teachers supports professional growth by helping evaluators and teachers identify areas for growth and opportunities to enhance teachers' skills and knowledge through:

- Self-assessment and reflection
- Working collaboratively with colleagues to improve curriculum, assessment, instruction, and other classroom practices
- Conducting action research
- Designing and piloting new instructional programs or techniques
- Analyzing student and school data to shape the school program and classroom instruction
- Other learning opportunities

DPAS II for Teachers supports continuous improvement of instructional practice and student outcomes by helping evaluators and teachers monitor professional growth and student improvement. Teaching is a complex and ever-changing profession requiring a teacher's commitment to continuously improve his or her practice and, in turn, student performance. Teachers need opportunities to try new tools, methods, and approaches for instruction. At the same time, these opportunities must be monitored to ensure that students are reaping the intended benefits.

DPAS II for Teachers assures quality teachers in every classroom by helping Evaluators and teachers select credible evidence about teacher performance. Evaluators use this evidence to make important decisions such as:

- Recognizing and rewarding effective practice
- Recommending continued employment and/or career growth opportunities
- Recommending strategies and/or activities that will enhance teacher effectiveness
- Developing a plan to improve teacher performance

ACADEMY OF DOVER CHARTER SCHOOL
Board Policy

- Beginning dismissal proceedings

Delaware Administrative Code, §106A requires all school districts and charter schools to evaluate teachers using the DPAS II Guide Revised for Teachers. This regulation also requires all Evaluators to complete DPAS II training, as developed by the Delaware Department of Education, and to be credentialed by the Delaware Department of Education.

“Evaluator” shall mean a Credentialed Observer who is responsible for a teacher’s Summative Evaluation. The assigned Evaluator shall generally conduct a teacher’s required observations as part of the appraisal cycle; however, the assigned Evaluator may designate another person who is also a Credentialed Observer to conduct the required observations.

400 Professional Employees

403 Drug and Alcohol Policy for Staff

The Board does not condone the misuse of drugs and alcohol and recognizes it as a serious problem with legal, physical, and social implications for the whole community.

The Board considers offenses related to drug and alcohol very serious both for the individual involved and for the welfare of others in the district. Therefore, the following rules and regulations have been developed:

1. Staff are not permitted to consume or be in possession of alcohol/drugs while on school property or at school functions. This includes field trips, student conferences, AOD Night, and other such activities away from the school where students are involved.
2. Staff found possessing or consuming alcohol/drugs on school property or at school related functions will be recommended for suspension or termination.
3. Staff should not consume alcohol/drugs prior to coming to school or prior to attending a school related function. Should a staff member be suspected of violating this provision, disciplinary action, as mentioned in number 2 above, they may be initiated following due process guidelines.
4. Administrators will be responsible for seeing that staff and chaperones are informed of the above policy.

400 Professional Employees

404 Personnel Files

It is necessary for the orderly operation of the Academy of Dover to maintain a file for the retention of all papers bearing upon an individual's duties and responsibilities as an employee of the Academy.

The Board requires that sufficient records be maintained to ensure an employee's qualifications for the job held, compliance with federal and state statutes, local benefit programs, and conformance with school rules and evidence of completed evaluations.

The Board delegates the establishment and maintenance of official personnel records to the Head of School or his/her designee.

Professional employees shall have access to their own files. Personnel wishing to review their own records shall request an appointment with the Administrative Assistant.

Personnel wishing to appeal material in their records shall make a request in writing to the HOS or Administrative Assistant and specify therein: name and date, material to be appealed, and reason for appeal.

400 Professional Employees

405 Rules of Procedure for Conducting Complaint Hearings

The Board of Directors of the Academy of Dover adopts the following rules of procedure, which shall govern all hearings before the Board held under the complaint policy.

Notice of Hearing

A hearing may be granted upon receipt of a written request signed by the aggrieved person, stating that a hearing is desired and documenting that due process has been followed as per the complaint policy. In such cases, the Board will notify all parties involved as to the time and place of the hearing.

The communication letter containing the notice of the date, time, and place of the hearing shall specifically advise the complainant of the following rights:

- A. The right to be present at the hearing and to be represented by counsel or by a representative
- B. The right to hear testimony.
- C. The right to give testimony.
- D. The right to question, either personally or through counsel/representative, any person giving testimony. When legal counsel/representative is used by the complainant, notice should be given to the Board before the time of the meeting.
- E. The rights to an open or closed hearing.

Order of Procedure

1. Preliminary Matters

- a. The President of the Board or his/her designee shall act as presiding officer and will announce that the hearing is being conducted under the provisions of the Board rules governing the conduct of hearings.
- b. The presiding officer will declare the hearing to be open and will inquire as to whether the secretary of the Board has met the requirements for giving notice of the hearing as specified above. The secretary shall provide affirmation that any requirements have been met.

2. Presentation of Evidence

- a. Each side will be permitted to present an opening statement as to the nature of the complaint, the policy or ruled violation. This statement is to be a brief overview of the issue before the Board, including the remedy sought. The remedy sought shall be confined to those areas in which the Board has clear authority to act under the Board policies. Opening statements will begin with the complainant, followed by AOD representative.
- b. The complainant may present evidence and offer testimony concerning the manner in which the complainant feels the official policy of the Board has been misinterpreted or misapplied, or specify the manner in which the complainant's rights have been violated. All testimony will be given under oath with the oath to

- be administered by the Secretary of the Board or by a member of the AOD staff designated by the secretary to administer the oath.
- c. Opportunity will be given at the conclusion of the testimony of each witness for the Academy's representatives, AOD's attorney, the Board, and the duly designated presiding officer to ask questions of the witness.
 - d. AOD's representative or attorney may then present evidence of testimony which is relevant to the matter being complained. All testimony will be given under oath with the oath to be administered by the Secretary of the Board or by a member of the staff designated by the secretary to administer the oath.
 - e. Opportunity will be given at the conclusion of testimony of each witness for cross examination by the complainant, his/her attorney/representative, or the members of the Board.
 - f. Closing statements may be offered by the complainant, then by AOD prior to losing the hearing.
3. General Hearing Procedures
- a. All evidence is admissible which is relevant, material, reliable, and probative, but which is not unduly repetitious or cumulative.
 - b. Objections to the admission of evidence shall be brief and shall state the grounds for such objections.
 - c. Strict judicial rules of evidence shall not be applicable to hearings conducted under these rules, and in each case the question of admissibility shall be whether the offered evidence is reasonable relevant to the material issue and whether it has substantial probative value with respect to such material issues. The presiding officer may limit or disallow cumulative or repetitious evidence and may curtail redundant questioning.
 - d. All testimony shall be given under oath with the following form of oath being used: "Do you swear to affirm that the testimony you are about to give is true and correct to the best of your knowledge?"
 - e. All parties in the proceeding may be represented by counsel or representative.
 - f. The Board may continue, adjourn, or postpone a hearing for good cause upon application of or on behalf of the complainant or on its own application.
 - g. The Board shall cause an electronic transcript of the hearing to be made by tape recorder or other suitable means of recording. If the complainant shall request a typed transcript of the hearing, he or she shall be responsible for the cost of preparing such transcript.
 - h. Any person who testifies as a witness shall be subject to the cross examination by other parties in the order set forth above, unless otherwise determined by the Board president or his/her designated presiding representative. Any witness is subject to examination by any member of the Board.
 - i. Any documents introduced into evidence shall be accepted and marked by the secretary of the Board and shall be made a part of the record of the hearing. The secretary shall prepare minutes, listing the names of all persons present, their attorneys, the witnesses testifying for each side, all exhibits introduced during the course of the hearing, and a brief summary of the proceedings.

- j. The Board may take administrative notice of its own acts, records, and policies.

4. Post-Hearing Procedures

- a. Each decision and order of the Board shall be delivered in writing with copies provided to all parties. Each decision and order shall set forth the findings of fact made by the Board and the conclusions based thereon, and shall state the specific disposition of the complaint. The Board shall submit its written decision within 10 business days following the conclusion of the hearing.
- b. Copies of the Board decision shall be mailed to the complainant and his or her attorney by certified mail, return receipt requested.
- c. A complainant who is not satisfied with the decision of the Board may appeal the decision within 30 days to the State Board of Education. This right of appeal is not valid for staff members who are complaining on issues of employment not grievable.

400 Professional Employees

406 Salary Determination

The Board shall endeavor to pay professional employees according to the fixed state salary schedule depending on enrollment and finances.

400 Professional Employees

407 Job-Related Expenses

Payment for the actual and necessary expenses, including traveling expenses, of any administrator of AOD that are incurred in the course of performing services for AOD shall be reimbursed in accordance with this policy.

Persons desiring reimbursement for professional travel expenses must have prior approval for the travel. They shall submit a "Request for Professional Travel or Professional Absence" form. This form is available in the school's office.

Request for Reimbursement:

The request for reimbursement on a reimbursement of personal expenses invoice should be submitted to AOD within 60 days after return from approved travel. All necessary receipts and tickets must be attached to this request. Should the request exceed the amount originally authorized, an explanation should be attached. The reimbursement of personal expenses invoice should be initiated by the HOS. Reimbursement of personal expenses invoices are subject to audit.

400 Professional Employees

408 Work Day

Work schedules of the professional and teaching staff shall be clearly specified in accordance with this policy to ensure the smooth and regular operation of the school.

The workday for employees shall be 8 hours (7:30-3:30) Monday through Friday.

Administration reserves the right to hold two staff meetings after school per month, where all staff are required to attend.

400 Professional Employees

409 Uncompensated Leave

The Board expects all employees to honor their contracts. Personnel may apply to the Board for an extended leave of absence without pay. Such leaves are not normally granted for the purpose of engaging in gainful employment.

Any absence other than provided by state law or board policy shall be considered unexcused and subject to payroll deduction.

Letters of reprimand will be sent to employees taking unexcused leaves without pay. An unexcused absence will be considered an act of insubordination, and shall be reported to the Board to determine if further action is necessary.

400 Professional Employees

410 Attendance Program

Each professional and support staff member serves as a vital link to an improved education for students. That link is broken when a single staff member is absent from school. As a result, the ability to provide a thorough and efficient education is weakened. The Board recognizes that a reasonable amount of absence due to bona fide sickness or emergency situations is often beyond the control of staff. On the other hand it believes that the school is entitled to a reasonable degree of regularity in the attendance of its staff in order to help realize the purposes and mission of the school.

Records of Absences:

Proof: The Administrative Assistant shall keep an accurate record of absences from duty of all employees including the reasons thereof. The Board may require a statement from an employee absent due to illness to the effect that he or she was unable to perform his or her duties during the period of absence. A physician's note may be required to confirm an employee's inability to perform his or her duties due to illness.

Deduction for Unexcused Absence:

For reasons other than those permitted by state law, the employee shall be deducted the appropriate per diem rate for each day of unexcused absence.

Attendance Program:

The Head of School shall be responsible for establishment of an attendance improvement program that is consistent with proper motivation techniques, correct supervisory practices, and policies in line with the policies of the Board and abides by the rules and regulations of the State Board of Education.

The primary purpose of this attendance program is to maximize staff attendance to foster a thorough and efficient education for students. In keeping with this purpose, the attendance program shall be executed in such a way as to:

1. Exemplify attendance practices for students to emulate.
2. Increase teacher-student contact time.
3. Decrease the amount of interruption in the instructional process.

400 Professional Employees

411 Sick Leave

There shall be a sick leave policy for professional employees that ensures that such employees will receive no less than the minimum sick leave provided under law. Such policy shall be in accordance with the following guidelines.

Sick leave for all employees shall accumulate in accordance with state law.

Sick Leave and Absences for other Reasons:

Teachers and other school employees shall be allowed ten (10) days sick leave per year with full pay. And those employees employed twelve (12) months a year shall be allowed 12 days of sick leave per year with full pay.

Upon retirement, a retiring employee will receive payment, in an amount equal to state salary for one-half of the number of "unused" sick leave days. The maximum payment shall not exceed the individual's state salary for 45 days.

500 Classified Employees

501 Employment of Classified Personnel

The Board recognizes the significant role that qualified, classified employees play in the effective operation of the educational programs of the school.

General Provisions

It is recognized that employment with AOD is at-will. This means that neither the employee nor AOD has entered into a contract regarding the duration of employment. Employees are free to terminate employment at AOD at any time, with or without reasons. Likewise, AOD has the right to terminate employment, or otherwise discipline, transfer, or demote employees at any time, with or without reasons, at the discretion of AOD. AOD will consider that it is voluntary termination of employment if the employee does any of the following:

1. Resign from Academy of Dover
2. Fail to return from an approved leave of absence on the date specified without prior approval, or
3. Fail to report to work or call in for one (1) work day.

An employee may be terminated for poor performance, misconduct, excessive absences, tardiness, discrimination, harassment, or other violations of AOD policies. Employment at-will means that the employee and/or AOD has the right to terminate employment for any or no reason.

Qualifications

All support service personnel employed by AOD shall qualify under the rules and regulations of the State Board of Education, the general laws of Delaware, and Board policy.

Appointment

Qualified applicants will be those who meet the minimum qualifications and have completed the application requirements.

During the interview process, a thorough effort will be made to hire the most qualified applicant. The Board has power to appoint an employee based upon the recommendation of the Head of School.

Supervision

All such personnel employed by AOD shall be under the general supervision of the Head of School.

500 Classified Employees

502 Employee Sexual Harassment or Sexual Misconduct

Sexual harassment is a form of employee misconduct which is not tolerated within the offices, school or upon the grounds of AOD or at any school sponsored activity. Sexual harassment includes unwelcome verbal or physical sexual advances or conduct of a sexual nature, sexually explicit or derogatory statements, or sexually discriminatory remarks made by someone in the work place. If you believe you are the subject of sexual harassment or are aware of an instance of sexual harassment, you should report the circumstances immediately to the Head of School or to the Board President.

No one will in any way use threats, coercion, or intimidation to deter an employee from reporting sexual harassment.

Upon notification to the Head of School or the Board President, an investigation of the complaint will be conducted immediately. Confidentiality of the complainant and/or witnesses to the alleged sexual harassment will be maintained to the fullest extent possible. If the circumstances warrant such action, the complainant and/or the alleged harasser may be placed on administrative leave pending completion of the investigation.

An employee found to have committed sexual harassment will be subject to disciplinary action. The type of disciplinary action taken will depend upon the seriousness of the offense committed and may include the giving of a reprimand or warning, placement on probation, suspension and/or termination of employment. Other remedial action may be taken, as appropriate. Employees who witness sexual harassment and do not report the harassment as indicated above may also be subject to disciplinary action.

Follow up inquiries may be made to ensure that sexual harassment has not resumed and that the complainant and witnesses have not suffered retaliation for their actions.

This policy shall be posted in the school.

500 Classified Employees

503 Sexual Harassment of Students by School Employees

The AOD Board of Directors believes that all persons are entitled to a safe school environment where individual rights are respected and protected, where all persons are free from intimidation, discrimination, and acts of violence, and where understanding and tolerance of individual differences are encouraged. As part of the schools efforts to foster such learning environment and in accordance with the state and federal law, the following policy on sexual harassment has been adopted:

Sexual harassment can be defined as any unwelcome attention of a sexual nature that interferes with a person's work performances or creates a hostile, intimidating work environment. It may include, but is not limited to: demeaning remarks about ones clothing, body, or sexual activity based on gender; verbal harassment or abuse; subtle pressure for sexual activity; unnecessary touching, patting, or pinching; leering at another person; demanding sexual favors accompanied by implied threats relating to job or school performance and evaluation; and physical assault.

It is important to remember that no person deserves to have his/her individual freedoms violated and that persons who have experienced sexual harassment often feel guilty, angry, powerless, and fearful.

The following are examples of some types of actions that may constitute sexual harassment, whether the harasser is another student or adult:

- Written contact: suggestive or obscene letters, notes, invitations, graffiti, and electronic messages of a sexual nature.
- Visual contact: sexually suggestive looks or gestures; displaying sexually suggestive or explicit objects or pictures, cartoons, photos, electronic images, posters, magazines, or other material.
- Verbal contact: sexually suggestive gestures or obscene comments including, but not limited to, those about a person's body, body parts, or sexual characteristics that are used in a negative or embarrassing way; verbal advances or sexually explicit statements which may take the form of threats, jokes, teasing, phone calls, or pressure for sexual contact or favors.
- Physical contact: uninvited and intentional touching, blocking, or cornering, of a person's freedom of movement; pinching, patting, invasion of persons privacy by leaning over him/her or brushing up against the other person's body; or actual sexual contact, assault, or rape.
- Retaliation: any action taken or threatened against another person for complaining about any of the behaviors described above.

ACADEMY OF DOVER CHARTER SCHOOL
Board Policy

If you believe you are the subject of sexual harassment or if you become aware of an instance of sexual harassment, the circumstances should be reported immediately to a teacher, parent, or guardian, or to any employee of the school who is in the position of authority.

Persons are urged to report violations of this policy and no one will in any way, use threats, coercion, or intimidation to prevent a person from reporting sexual harassment. All complaints made to district staff must be reported by such staff to the Head of School.

Upon receiving notice of a complaint of sexual harassment concerning a school employee, an investigation will be conducted as soon as possible. Confidentiality of the person and/or witnesses to prohibited conduct will be maintained to the fullest extent possible. A school employee who is found to have committed sexual harassment toward a student will be subject to disciplinary action; all reports of sexual harassment will be actively and diligently investigated, and appropriate action will be taken consistent with the provisions of existing collective bargaining agreements and/or state law. The type of disciplinary action taken will depend upon the seriousness of the offense committed and may include the giving of a reprimand or warning, placement on probation, suspension or termination of employment, or other disciplinary alternatives.

Follow up inquiries may be made to ensure that sexual harassment has not resumed and that the complainant and witnesses have not suffered retaliation for their actions.

This policy shall be posted within the school.

600 Finances

601 Preparation of Budget

The Board considers the preparation of an annual budget to be one of its most important responsibilities because the budget is the financial reflection of the educational plan for the school. The budget shall be designed to carry out the plan in a thorough and efficient manner and to maintain the facilities and honor the obligations of the school.

The AOD annual budget shall include the following information:

State Budget

The Head of School or Finance Manager shall have prepared for the Board of Directors the budgeted state allocations and proposed expenditures as prescribed by the laws of the State of Delaware.

Federal Budget

The Head of school or Finance Manager shall have prepared for the Board of Directors the budgeted federal allocations and proposed expenditures.

Local Budget

The Head of school or Finance Manager shall have prepared for the Board of Directors an annual budget containing all proposed allocations and expenditures of local funds for the operations of the school.

600 Finances

602 Bank Accounts

All funds under the control of the Board of Directors shall be prescribed by laws, regulations and efficient procedures.

The Head of School shall oversee the administration of all school accounts and shall present financial reports regularly to the school board.

Records

The Head of School shall have maintained a complete up to date record of all orders placed, expenditures and receipts, and shall make detailed monthly reports to the school board.

Receipts Control

Whenever school personnel exchange funds that are under the control of the school, such exchanges must be documented through the use of a duplicate receipt book, receipted bills and/or canceled checks.

Internal Funds

Student or club accounts shall be maintained in a safe depository. Ledgers for all funds shall be maintained, all transactions shall be properly documented, disbursements shall have appropriate signatures and all such funds are subject to audit by the State Auditor.

Approval to open or close an Internal Fund Student Bank Account shall be made by the school through the Head of School to the State Treasurer. When feasible, the funds shall be deposited in an interest-bearing account. All interest earned will be used for the benefit of students in student-related activities. A separate accounting shall be maintained of those monies deposited by each club of the school. Withdrawals may be made upon presentation of an approved Payment Voucher, signed by the faculty advisor and the class or club treasurer and/or president.

Interest earned by the bank account may be accounted for separately in which case withdrawals of interest must be approved by the Head of School.

600 Finances

603 External Bank Accounts

This policy recognizes that various organizations exist which provide financial support for school programs and activities such as PTO and booster clubs. These organizations often maintain bank accounts for the deposit of monies raised through the collection of dues or various fundraising projects. The purpose of this policy is to clearly define the circumstances under which a school employee is allowed to sign a check or other negotiable instrument related to such funds. Each check or negotiable instrument issued on an external bank account maintained by an organization which provides direct or indirect financial support for school programs and activities should require a minimum of two signatures. Under no circumstances, however, is a school employee to be the sole signer of a check or negotiable instrument related to such funds. An employee of the school may be a cosigner if the other signature is a live signature by someone other than an employee of the school.

For the purpose of this policy, employee includes volunteers and other positions approved by the Board.

600 Finances

604 Purchases Subject to Bid

It is the policy of the Board to obtain competitive bids for products and services where such bids are required by law or where such bids may be believed to bring about a cost saving to the school district.

Authorized school purchases of supplies, equipment or materials shall be made in accordance with the Laws of the State of Delaware. The Head of School shall be the Board designated representative for the purpose of Delaware Code relating to the procurement of material and award of contracts.

600 Finances

605 Purchases Not Budgeted

The laws of the State and the interests of the community require fiscal responsibility by the Board in the operation of the school. Appropriate fiscal controls are hereby adopted to insure that public funds are not disbursed in amounts of excess of the appropriations provided to this school.

Emergency Expenditures

The Head of School may make emergency expenditures when, in his/her opinion, these expenditures are necessary to the continued operation of the school. In each case, the Head of School shall report his/her actions to the Board.

600 Finances

606 Payroll Internal Control

Purpose

To provide consistent and effective accounting controls over payroll transactions ensuring responsibilities associated with such financial transactions within the Payroll Human Resource Statewide Technology (PHRST) system are segregated among staff to the extent possible so that no one employee has complete control over the processing and approving of transactions. The AOD Payroll Internal Control Policy and operating processes are designed to decrease the likelihood of errors as well as to reduce the risk of perpetrating fraud and/or concealing error in the normal course of an employee's duties.

Control Guidelines and Process Flow

Responsibilities associated with financial transactions within PHRST payroll system are segregated among staff to the extent possible so that no one employee has complete control over the processing of transactions. All financial documents processed in the PHRST payroll system require multiple approvals. The AOD payroll processing responsibilities are further broken down by (pay section/budget unit) for concurrent process flows utilizing the same required forms, approvals, processes and policies.

In addition to the AOD Payroll Internal Control Policy, the AOD and Innovative Schools Development Corporation (ISDC) Human Resource and Fiscal/Payroll staff shall strictly adhere to guidelines/rules as established and directed by Federal Employment Law, GAAP, Delaware Code, Budget Bill, State of Delaware Budget & Accounting Manual and PHRST/FSF systems in the preparation and processing of human resource, benefit administration, and payroll documents; Payroll Funding Expenditures Authorizations; PHRST data entry; records retention; and audit procedures.

AOD employees complete human resource (HR), benefit administration (BA) and payroll (PR) packet documents upon hire, update/change, and/or termination. HR/BA/PR packet documents include biweekly part-time contract and/or timesheets. All original HR/BA/PR documents and all direct employee communication is completed with and/or directed through the HR Offices and/or their designee as well as directly with State Organization points of contact as appropriate. Once employee packet documents are completed and reviewed and approved by HR staff those documents must follow appropriate levels of review and approval based on their content prior to submission to the centralized AOD HR/BA/PR/Fiscal Departments for initiating PHRST and/or First State Financials (FSF) payroll-related system processing.

Process Controls (Add additional lines for reviews/approvals as required)

Task: Approving Salaries

The levels of budget unit review and approval include:

- 1) The Board of Directors reviews/approves documents
- 2) The Head of School reviews/approves documents

Task: Data Entry of Salaries

The levels of budget unit review, approval, and data entry include:

- 1) The Administrative Assistant reviews all required approvals are complete
- 2) The Senior Accounts Specialist at ISDC performs data entry into PHRST

ACADEMY OF DOVER CHARTER SCHOOL

Board Policy

- 3) The AOD Administrative verifies the data entry

Task: Payroll Related (docking, payouts, prior period adjustments, etc.)

The levels of budget unit review, approval, and data entry include:

- 1) The Senior Accounts Specialist at ISDC reviews all required approvals are complete
- 2) The Senior Accounts Specialist at ISDC performs data entry into PHRST
- 3) The AOD Administrative Assistant verifies the data entry

Task: Report Reconciliation (Payroll and/or General Ledger reports)

The levels of budget unit review, approval, and data entry include:

- 1) The Senior Accounts Specialist at ISDC reviews all required approvals are complete
- 2) The AOD Administrative Assistant verifies data entry as reflected on PHRST reports
- 3) The Budget/Financial Specialist at ISDC verifies GL reports against Payroll reports

Task: Payroll Funding Adjustments in FSF (PFAs)

The levels of budget unit review, approval, and data entry include:

- 1) The Head of School reviews/approves documents
- 2) The Bill reviews all required approvals are complete
- 3) The Senior Accounts Specialist at ISDC performs data entry into FSF
- 4) The AOD Administrative Assistant verifies the data entry

Procedures

- Approval Process – HR documents (Salary, Promotion, Leave without Pay (LWOP), Termination, etc.)
Before any HR/PR data is entered in PHRST the following levels of review and approval and reporting occur:
 - 1) Position Job and Payroll Funding is validated in FSF and approved by the Accounting staff as a 1st level of approval
 - 2) Personal/Position/Job discrepancies are resolved with the HR Division as a 2nd level of approval
 - 3) Funding discrepancies are resolved with the Business Office Manager and/or designee for Finance as a 2nd level of approval and
 - 4) Policy and Regulation discrepancies/questions are resolved with the HR Division and Finance as a 2nd level of approval.
 - 5) Correct copies are returned to HR for their records.
 - 6) PR Specialist authorize resolutions on non-monetary discrepancies on HR/BA/PR packet documents as a 3rd level of approval
 - 7) PR Manager and/or Assistant PR Manager authorize resolutions on monetary discrepancies as a 3rd level of approval and
 - 8) Finance authorizes course of action on unresolved discrepancies, policy and/or regulation discrepancies with input from Human Resources.
- Approval Process – PR documents (Timesheets, docking, Direct Deposit, Tax Data, etc.)
Before any PR data is entered in PHRST the following levels of review and approval and reporting occur:

ACADEMY OF DOVER CHARTER SCHOOL

Board Policy

- 1) Head of School reviews documents for any necessary pre-approval (ie. supervisor approval for OT/docks) as a 1st level of approval
- 2) Administrative Assistant reviews for anomalies (i.e., pay 160 hours for 80 week, direct deposit with 30 digits) as a 1st level of approval
- 3) ISDC data enters into PHRST as a 2nd level of approval
- 4) Administrative Assistant makes notations on documentation for record-keeping purposes 2nd level of approval and
- 5) Hand-off documentation to Administrative Assistant for data entry verification as 3rd level of approval.

- Reconciliations to Payroll Funding Expenditure Authorization

After a successful biweekly audit of HR/BA/PR documents, during PHRST HR Processing Week, PR staff updates PHRST using all human resource and payroll documents received during the biweekly pay period timeframe. PR staff is responsible for Payroll reports for records retention and audit purposes. Note all updates to the payroll are reviewed, validated and approved. PR staff finalizes all packet documents for audit retention in the AOD Payroll files.

After Pay Confirm has processed, the payroll funding expenditure must be authorized with the following levels of reconciliation, review and authorization:

The 1 to 3 levels of budget unit reconciliation, review, and authorization include:

- 1) The Administrative Assistant reviews/reconciles PR and GL reports
- 2) The Head of School reviews/reconciles PR and GL reports
- 3) The Board President on the Payroll Authorized Signature Card reviews, approves, and submits electronic certification

Best Practice – PHRST access to Payroll Module is limited to view-only for:

- Anyone responsible for the Payroll Funding Expenditure Authorization process
- Anyone with authority to approve biweekly payroll (Signers on the Payroll Authorized Signature Card)

The Payroll Authorized Signature card is submitted to the Payroll Compliance Group (PCG) with the change of every Fiscal Year (July 1st), and also with the additions/deletions of Signers. All Cards will include the live signature of AOD Head of Agency.

The review and reconciliation of, at a minimum, the PHRST Document Direct Report DPR003, Payroll Expenditures by Appropriation, against available appropriated balances in the FSF system must be completed. An Authorized signer submits an electronic approval of biweekly payroll expenditures for the Department IDs they are responsible for by sending an email to PCG that includes the verbiage in the sample email below along with a list of the covered Department IDs:

To: PRFUND.AUTH@state.de.us

Subject: Payroll Funding Expenditures Authorization

I, _____ (Signer),
certify that the associated charges for the Pay Period ending

ACADEMY OF DOVER CHARTER SCHOOL
Board Policy

_____ (Pay Period End Date) for the Department IDs listed below meet all federal and state legal and regulatory requirements and that the represented expenditures do not exceed the remaining balance of funds appropriated by the General Assembly to this Organization.

Dept IDs: 958500

- Records Maintenance

All records within the AOD Payroll Office are maintained in a secure location, which is not available for public viewing or general access. All records are retained in accordance with all State and Federal retention regulations.

600 Finances

607 Financial Audit- Public

School accounts and financial transactions shall be audited yearly by auditors as prescribed by law.

600 Finances

608 P-Card Internal Control

Purpose

To provide consistent and effective accounting controls over transactions ensuring responsibilities associated with such financial transactions within the First State Financial (FSF) system are segregated among staff to the extent possible so that no one employee has complete control over the processing and approving of transactions. The Academy of Dover Charter School (hereinafter "AOD") FSF Internal Control Policy and operating processes are designed to decrease the likelihood of errors as well as to reduce the risk of perpetrating fraud and/or concealing error in the normal course of an employee's duties.

It is important to note that the use of the card is for AOD approved purchases only. The card shall not be used for personal expenses. *Please note: the use of this card to make personal or unauthorized purchases is grounds for discipline up to and including termination of employment.* In addition, the employee is personally liable to reimburse AOD for the full amount, including any interest or penalty, for any personal or unauthorized purchases.

Control Guidelines and Process Flow

Responsibilities associated with financial transactions within FSF system are segregated among staff to the extent possible so that no one employee has complete control over the processing of transactions. All financial documents processed in the FSF system require multiple approvals. The AOD processing responsibilities are further broken down by (pay section/budget unit) for concurrent process flows utilizing the same required forms, approvals, processes and policies.

In addition to the AOD PCard Internal Control Policy, the AOD and Innovative Schools Development Corporation (ISDC) FSF staff shall strictly adhere to guidelines/rules as established and directed by Federal Employment Law, GAAP, Delaware Code, Budget Bill, State of Delaware Budget & Accounting Manual and FSF systems in the preparation and processing of human resource, benefit administration, and payroll documents; Payroll Funding Expenditures Authorizations; FSF data entry; records retention; and audit procedures.

Procedures

Tracking Cardholders

The Board President authorizes which employees have PCards, and set and review credit limits. Based on the employee's work requirements, the Board President determines the type of PCard (travel only or purchasing including travel) each employee has. Under the direction of the Board President, the ISDC is responsible for enrolling and deleting cardholders. In addition, the ISDC reviews credit limits, reviews PCard purchases for possible misuse or fraud, and annually reviews and makes recommendations to the Head of School and Board President regarding credit limits.

When receiving the P-Card, the Head of School will meet with the individuals to go over the Credit Card Policy and Cardholder Agreement. Each participant shall sign the Cardholder Agreement, and a statement verifying that he or she has received a copy of the Credit Card Policy.

ACADEMY OF DOVER CHARTER SCHOOL
Board Policy

All purchases should be within the employee's budget authority or otherwise Pre-Approved by the Head of School and Board President. Except for travel expenditures (described below), the following conditions must be met, or specifically Pre-Approved by the Head of School:

- the transaction must be less than \$2,500;
- verbal price quotes must be obtained;
- State Contracts must be utilized where possible; and
- fragmentation of purchases is illegal and not allowed.

In addition, travel expenditures must conform to the State of Delaware Travel Policy which sets forth dollar limits on meals, tolls, personal telephone calls, tips, etc. Employees must reimburse AOD for any expenditure above the pre-determined allowable amounts.

Failure to follow this procedure can result in disciplinary action up to and including termination of employment.

Card Security (including Fraud and Lost/Stolen Cards)

Upon receipt of a PCard, the cardholder signs an agreement stating that he has received a PCard and understands the responsibilities as a cardholder. Included in the agreement are declarations that the PCard can only be used by the employee and can only be used for business (i.e. school) purposes. The cardholder reviews the JPMorgan statement for accuracy and quarterly, the Administrative Assistant verifies that the cardholder retains possession of the card (a verification log is maintained in the Office). If the cardholder's AOD employment is terminated, the Board President is responsible for retrieving the PCard, as well as any outstanding receipts and a list of purchases that have not been reconciled, from the cardholder. The Board President is responsible for cancelling/deleting the card.

A cardholder who intentionally makes unauthorized purchases or accidentally used the PCard is liable for the total dollar amount of such unauthorized purchases. The cardholder is also subject to disciplinary action, up to and including termination, and possible criminal action for intentionally making unauthorized purchases.

If a purchase was accidentally made using the PCard, the employee, within three (3) calendar days upon realization of the error, must provide full reimbursement to the Office. A copy of the check, along with the deposit slip and supporting documentation, will be forwarded to the Division of Accounting (DOA).

Employees who have been issued a VISA Travel/Purchase card are to insure the safety of the card. If a card is lost or stolen, the employee is to report it as soon as possible by calling the 1-800-270-7760 number furnished by JPMC Bank. In addition, the employee must notify the Head of School and Board President. Employees should treat this card as they do their own personal credit cards. (NOTE: Employees should write the account number and toll free telephone number on an index card for use in reporting this critical information to JPMC Bank.)

Employees are to use the card for AOD approved purchases and travel only. Travel expenditures must be reconciled within 30 days. By accepting the card the employee agrees to not make personal

ACADEMY OF DOVER CHARTER SCHOOL
Board Policy

purchases. Failure to follow this procedure can result in disciplinary action up to and including termination of employment.

Monitoring PCard Usage and Record Keeping

All cardholders must submit original receipts and/or invoices to the Administrative Assistant within one (1) week of the transaction, who submits them to ISDC. The cardholder identifies the purpose of the purchase on the receipt. If the receipt is lost and a replacement receipt is not obtained, the cardholder reimburses AOD for the expense.

Each week, FSF staff reviews the PCard transactions in FSF to make sure that all receipts have been received in the Office. The Administrative Assistant contacts employees for any missing receipts.

At least twice per month, staff review all receipts and verifies the transactions in FSF; the ISDC also initials the receipt to show that it has been verified. If required, the appropriation and the account charged are updated. The Head of School receives the verified receipts and approves the transactions in FSF. The Head of School initials the receipt to show that it has been approved. The FSF system generates a voucher from the approved PCard transactions and the Board President and Board Treasurer approves the approved voucher.

Using the monthly FSF PCard Voucher Transactions report, ISDC reconciles all FSF vouchers with the verified and approved receipts. All invoices, purchase card receipts, supporting documentation, and reports are securely filed and maintained for review/reference and audit in the Office.

The cardholder statements from JPMorgan Chase are presented monthly to the Citizen Budget Oversight Committee for review of expenditures that have been made using the PCard.

All personnel changes in FSF roles are communicated to the DOA.

700 Property

701 Safety

The Board directs that the facilities of the AOD shall be maintained and operated in a safe condition. The Head of School and staff shall be responsible for the safety of the pupils in this school, following federal, state, and school guidelines.

700 Property

702 Use of School Facilities

Recognizing that our school is an integral part of the community, it is the intent of the Board of Directors to make this facility available at a cost that reflects the base minimum for operations, and encourages groups to use our schools for their meetings and activities.

The following guidelines are designed to achieve this purpose:

Completion of an Application

1. Application for the school facility use may be made at the main office
2. Application shall be filed at least 30 days prior to the date requested
3. Applications must be signed by an authorized representative of the group applying
4. A single application may be made for a series of stated activities of like character
5. All applications will be forwarded by the Head of School to the Board of Directors for final approval
6. Applying organizations will receive confirmation by mail for approval of use

Conditions of use of School Facilities

1. The regular school program shall take precedence over any community organization request.
2. There is to be NO SMOKING or ALCOHOLIC beverages on school property at any time, this includes parking lots. Serving of refreshments in school buildings may be granted according to approved facility use request.
3. The use of school facilities shall be limited only to the specific area for which permission has been granted.
4. A custodian of the school shall be present in the building at all times when such building is being used by any organization or persons.
5. Fire lanes are to be open at ALL times.
6. Any additional cost for trash removal or other operational expenses will be charged to the organization.
7. It shall be the responsibility of the officers of the organization requesting the use of school facilities to enforce all rules and regulations and to accept complete responsibility for all members, guests, and/or visitors.
8. The sponsoring organization shall be responsible for personal liabilities and property damage while the facility is being used.
9. AOD strongly recommends that the sponsoring organization purchase special event insurance.
10. Violation of federal and state laws or school board policy will mean discontinuance of the use of facility.

11. If the requesting organization has an unpaid, open invoice for a previous event, said invoice must be paid in full prior to approval for additional requests.
12. Estimated deposit may be required for organizations with a history of outstanding invoices over 90 days.
13. Gymnasiums: use of gym is limited. Use of the gym for athletic or physical activities by outside users, shall be limited to the same or closely similar activities included in the school's physical education program or athletic program. The Head of School shall have the authority to make exceptions on a case by case basis.

Categories for Use of School Facilities

Potential users of school facilities will be placed in one of the four following categories for the purpose of assessing charges as follows:

1. Category 1

This category includes all school related organizations which are directly related to the primary purchase of education. Inclusion in this group will require Board of Directors approval. There will be no charge for the use of school facility for this category. The following are approved as Category 1 organizations:

- All school clubs
- All student organizations
- PTO's

2. Category 2

This category will consist of community groups that are directly related to the primary purpose of education, or certify their reason for use of school facilities to be educational, cultural, or civic in nature. Inclusion in this group will require Board approval. Any group wishing to qualify for the use of school facility as a Category 2 organization shall petition the school by letter. Such letter shall include the aims and objectives of the group and how its activities are either educational, cultural, or civic in nature. There will be no charge for use of school facilities for this category provided they use the facilities at those times that extra custodial staff and utilities are not required and no special arrangements are requested. If facilities are requested by users in this category at times the building is not normally staffed by custodians, when extra arrangements or cleanup is required, then users in this category shall be assessed the same rates as Category 3 users. The following are approved as Category 2 organizations:

- Boy Scouts
- Girls Scouts
- 4-H Clubs
- Little Leagues
- YMCA/ Boys and Girls Club

- Other recognized Non-profit organizations

3. Category 3

Category three (3) will pertain to organizations and community groups that are not directly related to the “Primary purpose of education” and whose reasons for use of school facilities are primarily political, religious, or recreational in nature. Any group that qualifies for the use of school facilities under the provisions of this category must certify that there is not individual monetary gain for representatives of the organization and that all charges or admissions in excess of costs will be donated to a charitable purpose and defined for the State of Delaware personal income tax. Category 3 users will pay the following charges:

- Charges when schools are normally staffed with custodial personnel:
 - Fees in accordance with approved rate schedules charged on an hourly basis.
 - Any other operational or special costs.
 - Custodial fees at the overtime rate if activity requires extra custodial assignment due to extensive preparation and/or cleanup time. No custodial time will be charged if extra assignment is not required.
- Charges for Use of Facilities during hours when schools are not normally staffed with custodial personnel:
 - Fees in accordance with approved rate schedules charged on an hourly basis.
 - Any other operational or special costs
 - Custodial fees at the overtime rate. Organization will be charged for the entire time school personnel are on page duty including preliminary preparation activities, during the actual program or event, and throughout the cleanup period.

4. Category 4

This category pertains to organizations and community groups that do not qualify for Category 1, 2 or 3.

All such organizations will be charged rental fees in accordance with the approved schedule. Custodial fees will be at the overtime hourly pay rate and charged for the entire time school district personnel are on duty including preliminary preparation time, during the actual event, and throughout the cleanup period.

5. Kitchen Facilities:

When kitchen facilities, equipment, or utensils are requested for the purpose of preparing food to be served to or by a community organization, such preparation shall be under the supervision of that cafeteria manager or member of the cafeteria staff. The organization will be charged the overtime hourly pay rate for personnel involved and will be charged the entire time such personnel are on duty including preparation, and cleanup time.

800 Operations

801 School Organization

The Board recognizes that the organizational structure of the school can help achieve a more effective instructional program and a more efficient operation.

AOD shall be organized to provide equal opportunity for the best possible education to all school children of the community. The school shall consist of the following types of units: Elementary K-5

The elementary school is organized to provide a program of instruction best suited for children during the early years of schooling.

800 Operations

802 School Day

AOD has a 180 day school year. The normal school day for the instruction of the students shall be in accordance with law and with the State of Delaware guidelines.

Each year the Head of School will create a school calendar and Hourly Attendance Survey for the following year, and submit them to the Department of Education in April.

800 Operations

803 Food Services

Food service programs of the school shall be directed towards meeting the needs of the students in accordance with State Guidelines.

Organization

Cafeteria operations and school meal programs shall be under the direction of the school cafeteria manager, who in turn is responsible to the Head of School. Such operations and programs are to be run in a manner that insures optimum coordination with educational programs.

Qualifications of Cafeteria Staff

1. Managers: all cafeteria managers shall have a minimum of a high school education or an equivalent of experience related to the responsibilities of the position. In addition, managers shall have displayed the ability to organize and lead other workers, an understanding of bulk cooking, and an understanding of planning, purchasing, and managing of cafeteria operations.
2. General Workers: all cafeteria workers shall be in good physical health and have the ability to, under guidance and supervision, use the special skills necessary to prepare and serve school meals as well as maintaining a clean and efficient cafeteria operation.

Operations

1. All menus will be in accordance with the National School Lunch requirements.
2. Government surplus commodities are to be used only for the school lunch programs.
3. Care and handling of food will be in accordance with health regulations.
4. Students are allowed to charge only in an unusual or emergency situation.
5. Students whose families are not financially able to pay for lunches may pay for a portion of the meals, or obtain the meals free of charge through the Federal School Fund Program.
6. Consumable food materials, including candy and other items for resale, shall not be sold to students during the regular school day except as a function of the school cafeteria, or by permission of the Head of School.

800 Operations

804 Transportation

Transportation for students shall be provided in accordance with law and the following guidelines:

Awarding of Contracts

When it is apparent that an opening exists for a bus contract, such opening shall be advertised in the local newspapers.

When awarding contracts, all applicants to be considered must meet or be able to meet the requirements established by Delaware State Law and Regulations.

Contract Addendums

When it is necessary to add an additional route not large enough to constitute a separate contract, the following procedure will be used;

- All current contractors will be notified of the available contract addendum and invited to make application.

Cancellation Process

1. There shall be an annual review of the students currently eligible for school transportation to determine the estimated number of students eligible for transportation for the next school year.
2. Giving primary consideration to service, safety and economy, any necessary revisions of the bus routes for the next school year shall be made based on the estimated number of students eligible for transportation. Administrative decisions shall be made on the total number of routes and buses needed for the next school year and the number of cancellations required.
3. This information shall be made available to the bus contractors prior to the ending of the current school year and prior to the identifications of the school bus routes to be cancelled.

800 Operations

805 Bonding

Prudent trusteeship of the resources of this school dictates that employees responsible for the safe keeping of school funds be bonded.

Handlers of substantial amounts of school money shall be bonded as required by Delaware Code.

800 Operations

806 Property Insurance

The Board recognizes its responsibility under law to ensure the real or personal property of this Charter School.

Liability Insurance

The Board of Directors shall purchase the type and amount of insurance necessary to protect itself as a corporate body, its individual members, its appointed officers, and its employees from financial loss arising out of any claim, demand, suit, or judgement by reason of alleged negligence or other act resulting in accidental injury to any person or in property damage within or without the school building while the above named insured are acting in the discharge of their duties within the scope of their employment and/or under the direction of the Board.

900 Community

901 Public Relations Objective

The purpose of the school community relations program is to establish and maintain a program that informs the public and involves them in the goals and services of the school.

Public Information

The Board of Education, through the Head of School, will supply a continuous flow of factual information to keep the public informed as to the needs and activities of the school.

900 Community

902 Public Participation at Board Meetings

The education of children is best served when communications and issues are open among all members of the educational community. The Board recognizes the value to school governance of public comments on educational issues and the importance of involving members of the public in Board meetings.

Expressions of Opinions

The Board of Directors will provide time to hear individuals, groups, and organizations in the community who wish to express their opinions concerning school matters.

All Board of Directors meetings are open to the public in accordance with state law and Board procedures.

900 Community

903 Public Attendance at School Events

The Board welcomes the public to all events held by the school, but the Board also acknowledges its duty to maintain order and preserve the facilities of the school during such events.

The Board has the authority to bar the attendance of any person at a school event whose conduct may constitute a disruption. The Board also prohibits alcoholic beverages, gambling, and use of drugs and tobacco on school premises.

900 Community

904 Citizens Advisory Committees

Citizen advisory committees are sometimes useful in keeping the Board and administration informed with regard to community opinion and in representing the community in the study of specific school problems.

The Board will appoint advisory committees to collaborate with the Board on school community problems, as specific needs arise.

The Board recognizes the value of association between the school personnel and the public, and encourages parent participation in school life through such organizations as PTO and study groups.

900 Community

905 Public Complaints

Any resident or community group shall have the right to present a request, suggestion, or complaint concerning school personnel, the program, or the operations of the school. At the same time, the Board has a duty to protect the staff from unnecessary harassment. It is the intent of this policy to provide a fair and impartial manner for seeking appropriate remedies.

Parents/citizens who wish to complain regarding an employee shall be encouraged to first address the problem directly with the employee in an effort to resolve the problem. Wherein the parent/citizen refuses to start the process at the lowest level, the Head of School shall assess the validity of the complaint and, if warranted, utilize discretionary problem solving. When appropriate, the employees shall be promptly informed of the nature of the complaint and the complainant.

A complaint, to be considered under this procedure, must be initiated within 30 days from the time when the person knew or should have known of its occurrence. Complaints may follow the chain of command to the Head of School. The appeal, following the informal conversations with the employee, must state:

1. Nature of the complaint
2. Response of employee in initial conversation
3. Specific problem or part of the problem still unresolved
4. Remedy sought

The Head of School or a designee will attempt to resolve the complaint as expeditiously as practical. A written response will be sent to the complainant.

A parent/citizen may appeal a written decision made by the Head of School or designee within ten days to the Board of Directors. The appeal must state:

1. Nature of the complaint
2. Response of employee in initial conversation
3. Specific problem or part of the problem still unresolved
4. Remedy sought

Any appeal will be presented to the Board by the next regular meeting. Within 30 days, the Board will either render a decision, request additional information, or establish a date for a meeting with the Board. Complaints regarding the program or operation of the school, not including personnel or students, will be addressed in an open session meeting with the Board. If the complaint involves personnel or other executive session matters, the Board will conduct a closed meeting with the complainant. If the complainant wishes the closed session to be open to the public, the school must receive notice by 10 calendar days prior to the meeting. Also, if the

ACADEMY OF DOVER CHARTER SCHOOL
Board Policy

complainant is bringing an attorney, the Board must be given 10 calendar days' notice. The complainant will be notified in writing of the disposition of the matter.

Information cannot be presented at an appeal level unless it has been presented at the lower first unless the information is requested by the person or persons rendering the decision.

900 Community

906 Freedom of Information Act

Under Title 29, Delaware Code, Chapter 100, the Freedom of Information Act (FOIA) establishes the right of the public to inspect and copy public records. Section 10003(b) of the FOIA provides that a public body, including the Academy of Dover, must establish rules and regulations regarding access to public records, as well as fees charged for copying such records. Any citizen shall be granted access to the school's public records under the following terms and conditions:

Definitions

The Act defines "Public record" as information of any kind, owned, made, used, retained, received, produced, composed, drafted or otherwise compiled or collected, by any public body, relating in any way to public business, or in any way of public interest, or in any way related to public purposes, regardless of the physical form or characteristic by which such information is stored, recorded or reproduced. For purposes of this chapter, the following records shall not be deemed public:

- (1) Any personnel, medical or pupil file, the disclosure of which would constitute an invasion of personal privacy, under this legislation or under any State or federal law as it relates to personal privacy;
- (2) Trade secrets and commercial or financial information obtained from a person which is of a privileged or confidential nature;
- (3) Investigatory files compiled for civil or criminal law-enforcement purposes including pending investigative files, pretrial and presentence investigations and child custody and adoption files where there is no criminal complaint at issue;
- (4) Criminal files and criminal records, the disclosure of which would constitute an invasion of personal privacy. Any person may, upon proof of identity, obtain a copy of the person's personal criminal record. All other criminal records and files are closed to public scrutiny. Agencies holding such criminal records may delete any information, before release, which would disclose the names of witnesses, intelligence personnel and aids or any other information of a privileged and confidential nature;
- (5) Intelligence files compiled for law-enforcement purposes, the disclosure of which could constitute an endangerment to the local, state or national welfare and security;
- (6) Any records specifically exempted from public disclosure by statute or common law;
- (7) Any records which disclose the identity of the contributor of a bona fide and lawful charitable contribution to the public body whenever public anonymity has been requested of the public body with respect to said contribution by the contributor;
- (8) Any records involving labor negotiations or collective bargaining;
- (9) Any records pertaining to pending or potential litigation which are not records of any court;
- (10) Any record of discussions held in executive session.

Documents in Active Use may be defined as those records required as working documents by the Academy of Dover staff in performing current assignments.

Documents in storage may be defined as documents officially placed in the custody of the Delaware State Archives.

FOIA Coordinator

Each public body shall designate a FOIA coordinator who shall serve as the point of contact for FOIA requests and coordinate the public body's responses thereto. The FOIA coordinator and/or his or her designee, working in cooperation with other employees and representatives, shall make every reasonable effort to assist the requesting party in identifying the records being sought, and to assist the public body in locating and providing the requested records. The FOIA coordinator and/or his or her designee will also work to foster cooperation between the public body and the requesting party. In addition to the foregoing responsibilities, the FOIA coordinator shall maintain a document tracking all FOIA requests. For each FOIA request, the document shall include, at a minimum, the requesting party's contact information, the date the public body received the request, the public body's response deadline, the date of the public body's response (including the reasons for any extension), the names, contact information and dates of correspondence with individuals contacted in connection with requests, the dates of review by the public body, the names of individuals who conducted such reviews, whether documents were made available, the amount of copying and/or administrative fees assessed, and the date of final disposition.

Procedures for Examining, Copying or Requesting Public Records

Except for materials and documents in active use or in storage, all public records may be examined and copies obtained at the office of Academy of Dover during regular business hours. Initial requests to inspect public documents shall be made in writing and delivered in person, by email, by fax, or through the internet. The request shall be as specific as possible and shall describe the records sought in sufficient detail to enable the school to locate the records with reasonable effort.

The FOIA Coordinator may request that the citizen seeking public records provide additional information to assist in locating records such as the types of records, parties to correspondence, and subject matter of the requested records. The FOIA Coordinator shall make every reasonable effort to assist in identifying the records sought.

FOIA does not require the school to create records, or prepare summaries or compilations of records.

The school reserves the right to deny any request in part or in full which does not comply with the requirements of this policy and/or provisions of FOIA.

Copying

Academy of Dover may make the copies at the time of the review or copy and email the records to the requestor. The requestor may elect to pick up the copies during regular business hours and submit payment at that time.

Requested documents will be copied in existing form, without reformatting or creation of a new document unless such customization is deemed reasonable and appropriate by the school FOIA officer. Copying a public document shall be done by the division involved.

Copying Fees

In instances in which paper records are provided to the requesting party, photocopying fees shall be as follows:

- *Standard-sized, black and white copies:* The first 20 pages of standard-sized, black and white copies material shall be provided free of charge. The charge for copying standard sized, black and white public records for copies over and above 20 shall be \$0.10 per sheet (\$0.20 for a double-sided sheet). This charge applies to copies on the following standard paper sizes: 8.5" x 11", 8.5" x 14", and 11" x 17".
- *Oversized copies/printouts:* The charge for copying oversized public records shall be as follows: 18" x 22", \$2.00 per sheet; 24" x 36", \$3.00 per sheet; documents larger than 24" x 36", \$1.00 per square foot.
- *Color copies/printouts:* An additional charge of \$1.00 per sheet will be assessed for all color copies or printouts for standard-sized copies (8.5" x 11", 8.5" x 14", and 11" x 17") and \$1.50 per sheet for larger copies.

Electronically Generated Records

The cost of copying records maintained in electronic format will be equal to the material costs in generating the records.

Payment

The public body may require all or any portion of the fees due hereunder to be paid prior to any service being performed pursuant to this section.

Administrative Fees

Administrative fees shall be levied for requests requiring more than 1 hour of staff time to process. Charges for administrative fees may include staff time associated with processing FOIA requests, including, without limitation: identifying records; monitoring file reviews; and generating computer records (electronic or print-outs). Administrative fees shall not include any cost associated with the public body's legal review of whether any portion of the requested records is exempt from FOIA. The public body shall make every effort to ensure that administrative fees are minimized, and may only assess such charges as shall be reasonable required to process FOIA requests. In connection therewith, the public body shall minimize the use of non-administrative personnel in processing FOIA requests, to the extent possible.

Prior to fulfilling any request that would require a requesting party to incur administrative fees, the public body shall provide an itemized written cost estimate of such fees to the requesting party, listing all charges expected to be incurred in retrieving such records. Upon receipt of the estimate, the requesting party may decide whether to proceed with, cancel, or modify the request.

Administrative fees will be billed to the requesting party per quarter hour. These charges will be billed at the current hourly pay grade (prorated for quarter hour increments) of the lowest-paid

ACADEMY OF DOVER CHARTER SCHOOL
Board Policy

employee capable of performing the service. Administrative fees will be in addition to any other charges incurred under this section for copying fees.

When multiple FOIA requests are submitted by or on behalf of the requesting party in an effort to avoid incurring administrative charges, the public body may in its discretion aggregate staff time for all such requests when computing fees hereunder. Notwithstanding the foregoing, any Freedom of Information Act policy adopted by a public body pursuant to subsection (b) of this section hereunder may include provisions for the waiver of some or all of the above administrative fees; provided that such waiver shall apply equally to a particular class of persons.

900 Community

907 Notification of Rights under FERPA for Students

What is FERPA?

The Family Educational Rights and Privacy Act (FERPA) is a Federal law that protects the privacy of student education records. The law gives parents certain rights with respect to their children's education records. These rights transfer to the student when he or she reaches the age of 18 or attends school beyond the high school level. These students are considered "eligible students".

What rights do parents and students over age 18 have?

- Parents or eligible students have the right to inspect the student's education records maintained by the school within 45 days from when the school receives a request for access. Written requests should be submitted to the school Principal which identifies the records they wish to inspect. The school Principal will make arrangements for access and notify the parent or eligible student of the time and place where the records may be inspected.
- Parents or eligible students have the right to request that a school correct records which they believe to be inaccurate or misleading. A written request should be made to the school Principal which clearly identifies what part of the record they want to have changed, and specify why it is inaccurate or misleading. If the school decides not to amend the record as requested, the school will notify the parent or eligible student of the decision and advise them of their right to a hearing regarding the request for amendment. Additional information will be provided to the parent or eligible student when notified of the right to a hearing.
- Generally, schools must have written permission from the parent or eligible student in order to release any information from a student's education record. However, FERPA allows schools to disclose those records, without consent, to the following parties or under the following conditions (34 CFR § 99.31):
 - School officials with legitimate educational interest;
 - Other schools to which a student is transferring;
 - Specified officials for audit or evaluation purposes;
 - Appropriate parties in connection with financial aid to a student;
 - Organizations conducting certain studies for or on behalf of the school;
 - Accrediting organizations;
 - To comply with a judicial order or lawfully issued subpoena;
 - Appropriate officials in cases of health and safety emergencies; and
 - State and local authorities, within a juvenile justice system, pursuant to specific State law
- Parents or eligible students have the right to file a complaint with the U.S. Department of Education concerning alleged failures by the school to comply with the requirements of FERPA. The name and address of the Office that administers FERPA are:

ACADEMY OF DOVER CHARTER SCHOOL
Board Policy

Family Policy
U.S. Department
400 Maryland
Washington, D.C. 20202-8520

Compliance
of
Avenue,

Office
Education
SW

900 Community

908 Relations with Special Interest Groups

Any requests from civic organizations or special interest groups which involve such activities as patriotic functions, contests, exhibits, sales of products to or by students, sending promotional materials home with students, prizes or fund raising must be examined to ensure that such activities promote student interests primarily, rather than the special interest of any particular group.

Literature or Materials of Outside Origin

Literature or materials of outside origin shall not be distributed in the schools except as the administrative staff determines that such procedure has a primary educational purpose and function.

Lists

School personnel shall not furnish to any outside organization or individuals any list of pupils, parents, or teachers, unless they receive authority from the Head of School.

900 Community

909 School and Community Notification and Procedures for Educating and Monitoring Sex Offenders

Guiding Principles

1. All children should be as safe as possible in our schools and communities. As a part of this, those responsible for caring for our children should have the tools necessary to keep our children safe from sexual abuse.
2. Community notifications should be as accessible as possible and include as much information as is necessary for the school and community to make informed decisions about personal safety.
3. Schools must know when a juvenile sex offender enrolls in its school, both for the safety of the school and for the safety of the sex offender.
4. Parents should be regularly informed through existing communication methods, such as newsletters, about the availability of notifications, changes to information enclosed in school district binders, and the sex offender notification website.

Notification Requirements

1. Community notification of sex offenders is the responsibility of the law enforcement agencies. The posting of this public information is required by law and is available on the Delaware State Police Sex Offender Registry website: www.state.de.us/dsp/sexoff/index.htm Community members can subscribe to register for email updates. Efforts will be made to encourage all parents to subscribe to the community notification service on their personal computers.
2. The school must place all notifications in a binder to be located in the main office and available for review upon request by adults and juveniles with adult supervision. The Head of School shall be responsible for ensuring the binder is up to date and available at all times.
3. School administration shall inform staff of the appropriate individuals to whom parents should be referred, such as the guidance counselor and/or Head of School.
4. The school shall keep the Note to Parents with any notification viewed by parents to assure that parents understand that:
 - a. The notice is intended for informational purposes to assist in preparing children for personal safety.
 - b. A sex offender is not necessarily a child predator;
 - c. Resources are available to help them educate children about personal safety;
 - d. No one is to post the notification;
 - e. No one should take action against the person for property of the offender, offenders' family or household, or employer;
 - f. Child abuse must be reported
5. The school shall distribute the Note to Staff so that staff understand that:

- a. The notification is intended for staff to exercise appropriate caution to protect those under their care and supervision;
 - b. Inquiries or reports should be referred to the appropriate resources;
 - c. No one is to post the notification; and
 - d. No one should take action against the person or property of the offender, offender's family or household or employer.
6. The school will maintain a log to document receipt of sex offender notifications and appropriate distribution.
 7. Parents shall be reminded regularly of sex offender information available through communication, such as the annual calendar and regular newsletters.

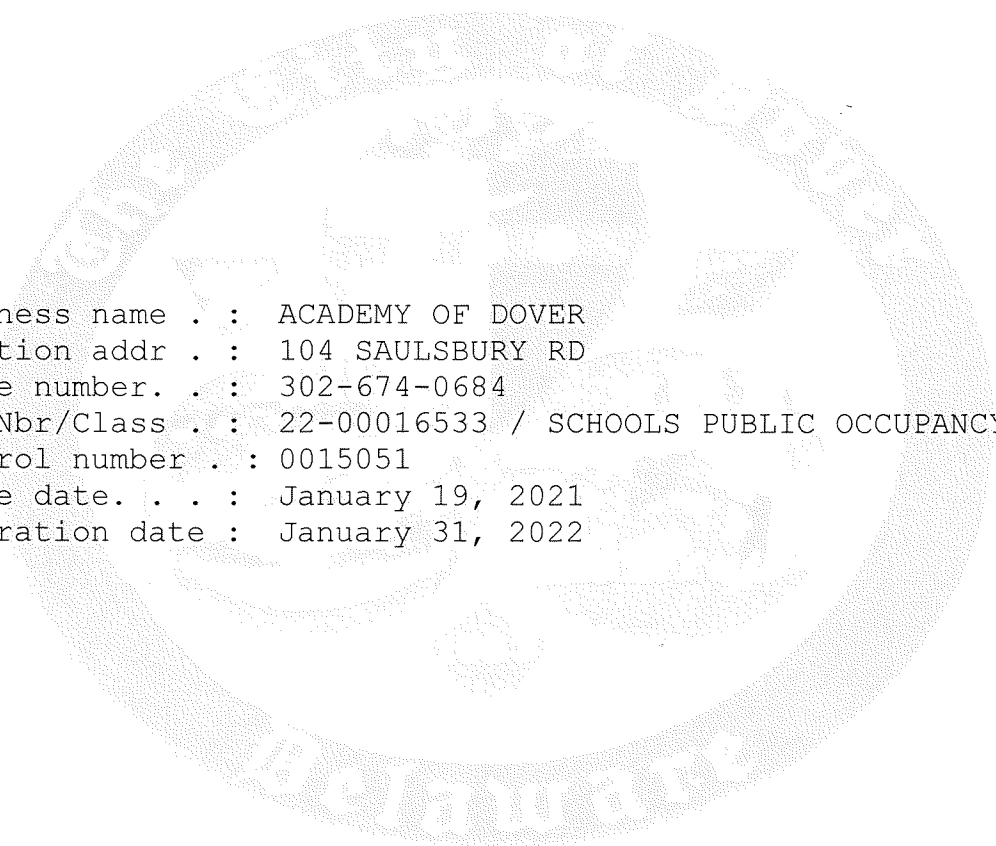
Educational Placement and Monitoring of Sex Offender Students

1. Attorney General or Law Enforcement Notification: The Head of School is notified by the attorney general's office or local law enforcement agencies after a student has been arrested on one or more felony charges. It is in the interest of all students and staff that school authorities review such incidents to explore the appropriateness of the student's educational placement. That process should also explore whether or not the behavior may indicate a potential danger to staff, students, and/or the educational environment. It is in the interest of the student concerned that there be a review of the case and that there be a means to assist in exploring educational options if needed. The review shall occur in accordance with the safeguards and consequences in the student codes of conduct. Please refer to the appropriate code of conduct for additional information including due process rights and possible options, which may include alternative placement, suspension, and/or expulsion. The code of conduct shall also apply to out of school conduct of a student if the district believes that the student presents a threat to the health, safety, or welfare of other students and staff. In such cases, the school may take appropriate action, including expulsion. In any event, the Board of Directors shall receive recommendations from school review and central review. Based on such notification, the Board may hear the case or may provide an alternative educational setting or homebound instruction until the courts have made a determination of innocence or guilt.
2. Enrollment of new students: the receiving school shall request all records including disciplinary files and information. The current sex offender binder should also be referenced to ensure the enrollee has no previous record. If it is determined that the enrollee has been arrested or convicted as a sex offender, enrollment and placement shall be delayed pending further investigation and potential alternative placements.
3. Convicted sex offenders shall not be permitted to attend school where the victim or any member of the victim's immediate family will be attending or working.

Appendix 7 - Up-to-date Certificate of Occupancy

Public Occupancy License for

ACADEMY OF DOVER
104 SAULSBURY RD
DOVER DE 19904

The seal of the City of Dover, Delaware, is a large, circular emblem in the background. It features a central figure, likely a Native American, surrounded by the text "The City of Dover" at the top and "Delaware" at the bottom.

Business name . . : ACADEMY OF DOVER
Location addr . . : 104 SAULSBURY RD
Phone number . . : 302-674-0684
Lic Nbr/Class . . : 22-00016533 / SCHOOLS PUBLIC OCCUPANCY
Control number . . : 0015051
Issue date . . . : January 19, 2021
Expiration date : January 31, 2022

LICENSE MUST BE DISPLAYED IN PUBLIC VIEW

The City of Dover

**15 LOCKERMAN PLAZA
DOVER DE 19901**

Public Occupancy License for

ACADEMY OF DOVER
104 SAULSBURY RD
DOVER DE 19904

Business name . . : ACADEMY OF DOVER
Location addr . . : 104 SAULSBURY RD
Phone number . . : 302-674-0684
Lic Nbr/Class . . : 22-00016533 / SCHOOLS PUBLIC OCCUPANCY
Control number . . : 0015051
Issue date . . . : January 19, 2021
Expiration date : January 31, 2022

LICENSE MUST BE DISPLAYED IN PUBLIC VIEW

The City of Dover

**15 LOCKERMAN PLAZA
DOVER DE 19901**

Appendix 8 - Up-to-date Fire Inspection Certificate

Appendix 9 - Up-to-date Insurance Certificates

504000852658700DECBPPQCP008

504000852658700DECBPPQCP008

INSURED COPY

Liberty Mutual Insurance
P.O. Box 188060
Fairfield, OH 45018

ACADEMY OF DOVER
104-106 SALISBURY ROAD
DOVER DE 19904

TO: ACADEMY OF DOVER
104-106 SALISBURY ROAD
DOVER DE 19904

Liberty Mutual Insurance
P.O. Box 188060
Fairfield, OH 45018

INSURED COPY

11/16/2020

8526687

NN221071 1911

PGDM060D J10794

OCAFPPN

00000033

Page

2



Coverage is provided in:
THE NETHERLANDS INSURANCE COMPANY-A STOCK COMPANY

This policy has been prepared for:

ACADEMY OF DOVER
104-106 SALISBURY ROAD
DOVER DE 19904

Agent Name and Address:

L & W INSURANCE
PO BOX 918
DOVER DE 19903-0918

Agent Code: 5290824

Agent's Phone Number: (302)-674-3500

Your insurance policy is enclosed. Please place it with your important papers.

Thank you for selecting us to service your insurance needs!

INSURED COPY

INSURED COPY

TERRORISM INSURANCE PREMIUM DISCLOSURE AND OPPORTUNITY TO REJECT

This notice contains important information about the Terrorism Risk Insurance Act and your option to reject terrorism insurance coverage. Please read it carefully.

THE TERRORISM RISK INSURANCE ACT

The Terrorism Risk Insurance Act, including all amendments (“TRIA” or the “Act”), establishes a program to spread the risk of catastrophic losses from “certain acts of terrorism” between insurers and the federal government. If an individual insurer’s losses from “certified acts of terrorism” exceed a specified deductible amount the government will generally reimburse the insurer for a percentage of losses (the “Federal Share”) paid in excess of the deductible, but only if aggregate industry losses from such acts exceed the “Program Trigger”. An insurer that has met its insurer deductible is not liable for any portion of losses in excess of \$100 billion per year. Similarly the federal government is not liable for any losses covered by the Act that exceed this amount. If aggregate insured losses exceed \$100 billion, losses up to that amount may be pro-rated, as determined by the Secretary of the Treasury.

Beginning in calendar year 2020, the Federal Share is 80% and the Program Trigger is \$200,000,000.

MANDATORY AVAILABILITY OF COVERAGE FOR “CERTIFIED ACTS OF TERRORISM”

TRIA requires insurers to make coverage available for any loss that occurs within the United States (or outside of the U.S. in the case of U.S. missions and certain air carriers and vessels), results from a “certified act of terrorism” AND that is otherwise covered under your policy.

A “certified act of terrorism” means:

[A]ny act that is certified by the Secretary [of the Treasury], in consultation with the Secretary of Homeland Security, and the Attorney General of the United States

- (i) to be an act of terrorism
- (ii) to be a violent act or an act that is dangerous to
 - (I) human life
 - (II) property; or
 - (III) infrastructure;
- (iii) to have resulted in damage within the United States, or outside of the United States in the case of
 - (I) an air carrier (as defined in section 40102 of title 49, United States Code) or United States flag vessel (or a vessel based principally in the United States, on which United States income tax is paid and whose insurance coverage is subject to regulation in the United States); or
 - (II) the premises of a United States mission; and
- (iv) to have been committed by an individual or individuals as part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the United States Government by coercion.

REJECTING TERRORISM INSURANCE COVERAGE – WHAT YOU MUST DO

We have included in your policy coverage for losses resulting from “certified acts of terrorism” as defined above.

THE PREMIUM CHARGE FOR THIS COVERAGE APPEARS ON THE DECLARATIONS PAGE OF THE POLICY AND DOES NOT INCLUDE ANY CHARGES FOR THE PORTION OF LOSS COVERED BY THE FEDERAL GOVERNMENT UNDER THE ACT. If we are providing you with a quote, the premium charge will also appear on your quote as a separate line item charge.

Note: With respect to Excess or Umbrella policies, this offer of coverage pertains only to those lines of business covered by TRIA and, more specifically, does not apply to commercial automobile insurance. In addition, this offer of TRIA coverage is expressly conditioned upon your acceptance of coverage for “certified acts of terrorism” on all underlying insurance policies that are subject to TRIA. If you reject such coverage on your primary liability policies, you must also reject it on your Excess or Umbrella policy.

IF YOU CHOOSE TO REJECT THIS COVERAGE PLEASE CHECK THE BOX BELOW, SIGN THE ACKNOWLEDGMENT, AND RETURN IT IN THE ENCLOSED ENVELOPE. Please ensure any rejection is received within thirty (30) days of the effective date of your policy.

_____ I hereby reject this offer of coverage. I understand that by rejecting this offer, I will have no coverage for losses arising from “certified acts of terrorism” and my policy will be endorsed accordingly.

Note that certain states (currently CA, GA, IA, IL, ME, MO, NY, NC, NJ, OR, RI, WA, WI and WV) mandate coverage for loss caused by fire following a “certified act of terrorism” in certain types of insurance policies. If you reject TRIA coverage in these states on those policies, you will not be charged any additional premium for that state mandated coverage.

Policyholder/Applicant Signature

Date

Print Name

The summary of the Act and the coverage under your policy contained in this notice is necessarily general in nature. Your policy contains specific terms, definitions, exclusions and conditions. In case of any conflict, your policy language will control the resolution of all coverage questions. Please read your policy carefully.

If you have any questions regarding this notice, please contact your agent.

FOLD

Policy Number

Agency Code

8526587

5290824

Insured Name:

Please fold on line. Company address must show through window.

ACADEMY OF DOVER

Effective Date:

11/16/2020

IMPORTANT POLICYHOLDER INFORMATION CONCERNING BILLING PRACTICES

Dear Valued Policyholder: This insert provides you with important information about our policy billing practices that may affect you. Please review it carefully and contact your agent if you have any questions.

Premium Notice: We will mail you a policy Premium Notice separately. The Premium Notice will provide you with specifics regarding your agent, the account and policy billed, the billing company, payment plan, policy number, transaction dates, description of transactions, charges/credits, policy amount balance, minimum amount, and payment due date. This insert explains fees that may apply to and be shown on your Premium Notice.

Available Premium Payment Plans:

- **Annual Payment Plan:** When this plan applies, you have elected to pay the entire premium amount balance shown on your Premium Notice in full. No installment billing fee applies when the Annual Payment Plan applies.
- **Installment Payment Plan:** When this plan applies, you have elected to pay your policy premium in installments (e.g.: quarterly or monthly installments – Installment Payment Plans vary by state). As noted below, an installment fee may apply when the Installment Payment Plan applies.

The Premium Payment Plan that applies to your policy is shown on the top of your Premium Notice. Please contact your agent if you want to change your Payment Plan election.

Installment Payment Plan Fee: If you elected to pay your premiums in installments using the Installment Premium Payment Plan, an installment billing fee applies to each installment bill. The installment billing charge will not apply, however, if you pay the entire balance due when you receive the bill for the first installment. Because the amount of the installment charge varies from state to state, please consult your Premium Notice for the actual fee that applies.

Dishonored Payment Fee: Your financial institution may refuse to honor the premium payment withdrawal request you submit to us due to insufficient funds in your account or for some other reason. If that is the case, and your premium payment withdrawal request is returned to us dishonored, a payment return fee will apply. Because the amount of the return fee varies from state to state, please consult your premium Notice for the actual fee that applies.

Late Payment Fee: If we do not receive the minimum amount due on or before the date or time the payment is due, as indicated on your Premium Notice, you will receive a policy cancellation notice effective at a future date that will also reflect a late payment fee charge. Issuance of the cancellation notice due to non-payment of a scheduled installment(s) may result in the billing and collection of all or part of any outstanding premiums due for the policy period. Late Payment Fees vary from state to state and are not applicable in some states.)

Special Note: Please note that some states do not permit the charging of certain fees. Therefore, if your state does not allow the charging of an Installment Payment Plan, Dishonored Payment or Late Payment Fee, the disallowed fee will not be charged and will not be included on your Premium Notice.

EFT-Automatic Withdrawals Payment Option: When you select this option, you will not be sent premium notices and, in most cases, will not be charged installment fees. For more information on our EFT-Automatic Withdrawals payment option, refer to the attached policyholder plan notice and enrollment sheet.

Once again, please contact your agent if you have any questions about the above billing practice information.

Thank you for selecting us to service your insurance needs.

Insured Copy

LIBERTY MUTUAL GROUP CALIFORNIA PRIVACY NOTICE
COMMERCIAL LINES (EXCLUDING WORKERS' COMPENSATION)
(EFFECTIVE JANUARY 1, 2020)

Liberty Mutual Group and its affiliates, subsidiaries, and partners (collectively "Liberty Mutual" or "we", "us" and "our") provide insurance to companies and other insurers. This Privacy Notice explains how we gather, use, and share your data. This Privacy Notice applies to you if you are a **Liberty Mutual commercial line insured or are a commercial line claimant residing in California**. It does not apply to covered employees or claimants under Workers' Compensation policies. If this notice does not apply to you, go to libertymutual.com/privacy to review the applicable Liberty Mutual privacy notice.

What Data Does Liberty Mutual Gather?

We may collect the following categories of data:

- **Identifiers**, including a real name, alias, postal address, unique personal identifier, online identifier, Internet Protocol address, email address, account name, Social Security Number, driver's license number, or other similar identifiers;
- **Personal information described in California Civil Code § 1798.80(e)**, such as your name, signature, Social Security Number, physical characteristics or description, address, telephone number, driver's license or state identification card number, insurance policy number, education, employment, employment history, bank account number, financial information, medical information, or health insurance information;
- **Protected classification characteristics**, including age, race, color, national origin, citizenship, religion or creed, marital status, medical condition, physical or mental disability, sex (including gender, gender identity, gender expression, pregnancy or childbirth and related medical conditions), sexual orientation, or veteran or military status;
- **Commercial information**, including records of personal property, products or services purchased, obtained, or considered, or other purchasing or consuming histories and tendencies;
- **Internet or other similar network activity**, including browsing history, search history, information on a consumer's interaction with a website, application, or advertisement;
- **Professional or employment related information**, including current or past job history or performance evaluations;
- **Inferences drawn from other personal information**, such as a profile reflecting a person's preferences, characteristics, psychological trends, predispositions, behavior, attitudes, intelligence, abilities, and aptitudes;
- **Risk data**, including data about your driving and/or accident history; this may include data from consumer reporting agencies, such as your motor vehicle records and loss history information, health data, or criminal convictions; and
- **Claims data**, including data about your previous and current claims, which may include data regarding your health, criminal convictions, third party reports, or other personal data.

For information about the types of personal data we have collected about California consumers in the past twelve (12) months, please go to libertymutual.com/privacy and click on the link for the California Supplemental Privacy Policy.

How We Get the Personal Data:

<p>We gather your personal data directly from you. For example, you provide us with data when you:</p>	<p>We also gather your personal data from other people. For example:</p>
<ul style="list-style-type: none"> • ask about, buy insurance or file a claim 	<ul style="list-style-type: none"> • your insurance agent or broker
<ul style="list-style-type: none"> • pay your policy 	<ul style="list-style-type: none"> • your employer, association or business (if you are insured through them)
<ul style="list-style-type: none"> • visit our websites, call us, or visit our office 	<ul style="list-style-type: none"> • our affiliates or other insurance companies about your transactions with them
	<ul style="list-style-type: none"> • consumer reporting agencies, Motor Vehicle Departments, and inspection services, to gather your credit history, driving record, claims history, or value and condition of your property

	<ul style="list-style-type: none"> • other public directories and sources
	<ul style="list-style-type: none"> • third parties, including other insurers, brokers and insurance support organizations who you have communicated with about your policy or claim, anti-fraud databases, sanctions lists, court judgments and other databases, government agencies, open electoral register or in the event of a claim, third parties including other parties to the claim witnesses, expert loss adjustors and claim handlers
	<ul style="list-style-type: none"> • other third parties who take out a policy with us and are required to provide your data such as when you are named as a beneficiary or where a family member has taken out a policy which requires your personal data

For information about how we have collected personal data in the past twelve (12) months, please go to libertymutual.com/privacy and click on the link for the California Supplemental Privacy Policy.

How Does Liberty Mutual Use My Data?

Liberty Mutual uses your data to provide you with our products and services, and as otherwise provided in this Privacy Notice. Your data may be used to:

<u>Business Purpose</u>	<u>Data Categories</u>
<p>Market, sell and provide insurance. This includes for example:</p> <ul style="list-style-type: none"> • calculating your premium; • determining your eligibility for a quote; • confirming your identity and service your policy; 	<ul style="list-style-type: none"> • Identifiers • Personal Information • Protected Classification Characteristics • Commercial Information • Internet or other similar network activity • Professional or employment related information • Inferences drawn from other personal information • Risk data • Claims data
<p>Manage your claim. This includes, for example:</p> <ul style="list-style-type: none"> • managing your claim, if any; • conducting claims investigations; • conducting medical examinations; • conducting inspections, appraisals; • providing roadside assistance; • providing rental car replacement, or repairs; 	<ul style="list-style-type: none"> • Identifiers • Personal Information • Protected Classification Characteristics • Commercial Information • Internet or other similar network activity • Professional or employment related information • Inferences drawn from other personal information • Risk data • Claims data
<p>Day to Day Business and Insurance Operations. This includes, for example:</p> <ul style="list-style-type: none"> • creating, maintaining, customizing and securing accounts; • supporting day-to-day business and insurance related functions; • doing internal research for technology development; • marketing and creating products and services; • conducting audits related to a current contact with a consumer and other transactions; • as described at or before the point of gathering personal data or with your authorization; 	<ul style="list-style-type: none"> • Identifiers • Personal Information • Protected Classification Characteristics • Commercial Information • Internet or other similar network activity • Professional or employment related information • Inferences drawn from other personal information • Risk data • Claims data

<p>Security and Fraud Detection. This includes for example:</p> <ul style="list-style-type: none"> • detecting security issues; • protecting against fraud or illegal activity, and to comply with regulatory and law enforcement authorities; • managing risk and securing our systems, assets, infrastructure and premises; roadside assistance, rental car replacement, or repairs • help to ensure the safety and security of Liberty staff, assets and resources, which may include physical and virtual access controls and access rights management; • supervisory controls and other monitoring and reviews, as permitted by law; and emergency and business continuity management; 	<ul style="list-style-type: none"> • Identifiers • Personal Information • Protected Classification Characteristics • Commercial Information • Internet or other similar network activity • Professional or employment related information • Inferences drawn from other personal information • Risk data • Claims data
<p>Regulatory and Legal Requirements. This includes for example:</p> <ul style="list-style-type: none"> • controls and access rights management; • to evaluate or conduct a merger, divestiture, restructuring, reorganization, dissolution, or other sale or transfer of some or all of Liberty's assets, whether as a going concern or as part of bankruptcy, liquidation, or similar proceeding, in which personal data held by Liberty is among the assets transferred; • exercising and defending our legal rights and positions; • to meet Liberty contract obligations; • to respond to law enforcement requests and as required by applicable law, court order, or governmental regulations; • as otherwise permitted by law. 	<ul style="list-style-type: none"> • Identifiers • Personal Information • Protected Classification Characteristics • Commercial Information • Internet or other similar network activity • Professional or employment related information • Inferences drawn from other personal information • Risk data • Claims data
<p>Improve Your Customer Experience and Our Products. This includes for example:</p> <ul style="list-style-type: none"> • improve your customer experience, our products and service; • to provide, support, personalize and develop our website, products and services; • create and offer new products and services; 	<ul style="list-style-type: none"> • Identifiers • Personal Information • Commercial Information • Internet or other similar network activity • Professional or employment related information • Inferences drawn from other personal information • Risk data • Claims data
<p>Analytics to identify, understand and manage our risks and products. This includes for example:</p> <ul style="list-style-type: none"> • conducting analytics to better identify, understand and manage risk and our products; 	<ul style="list-style-type: none"> • Identifiers • Personal Information • Protected Classification Characteristics • Commercial Information • Internet or other similar network activity • Professional or employment related information • Inferences drawn from other personal information • Risk data • Claims data
<p>Customer service and technical support. This includes for example:</p> <ul style="list-style-type: none"> • answer questions and provide notifications; • provide customer and technical support; 	<ul style="list-style-type: none"> • Identifiers • Personal Information • Commercial Information • Internet or other similar network activity • Professional or employment related information • Inferences drawn from other personal information • Risk data • Claims data

How Does Liberty Mutual Share My Data?

Liberty Mutual does not sell your personal data as defined by the California Consumer Privacy Act.

Liberty Mutual shares personal data of California consumers with the following categories of third parties:

- Liberty Mutual affiliates;
- Service Providers;
- Public entities and institutions (e.g. regulatory, quasi-regulatory, tax or other authorities, law enforcement agencies, courts, arbitrational bodies, and fraud prevention agencies);
- Professional advisors including law firms, accountants, auditors, and tax advisors;
- Insurers, re-insurers, policy holders, and claimants; and
- As permitted by law.

Liberty Mutual shares the following categories of personal data regarding California consumers to service providers for business purposes:

Identifiers	Personal Data;
Protected Classification Characteristics;	Commercial Information;
Internet or other similar network activity;	Claims Data;
Inferences drawn from other personal information;	Risk Data;
Professional, employment, and education information;	

For information about how we have shared personal information in the past twelve (12) months, please go to libertymutual.com/privacy and click on the link for the California Supplemental Privacy Policy.

What Privacy Rights Do I Have?

The California Consumer Privacy Act provides California residents with specific rights regarding personal information. These rights are subject to certain exceptions. Our response may be limited as permitted under law.

Access or Deletion

You may have the right to request that Liberty Mutual disclose certain information to you about our collection and use of your personal data in the twelve (12) months preceding such request, including a copy of the personal data we have collected. You also may have the right to request that Liberty Mutual delete personal data that Liberty Mutual collected from you, subject to certain exceptions.

Specifically, you have the right to request that we disclose the following to you, in each case for the twelve (12) month period preceding your request:

- the categories of personal data we have collected about you;
- the categories of sources from which the personal data was/is collected;
- our business or commercial purpose for collecting personal data;
- the categories of third parties with whom we share personal data;
- the specific pieces of data we have collected about you;
- the categories of personal data about you, if any, that we have disclosed for monetary or other valuable consideration, including the categories of third parties to which we have disclosed the data, by category or categories of personal data for each third party to which we disclosed the personal data; and
- the categories of personal data about you that we disclosed for a business purpose.

You can make a request by either:

Calling: 800-344-0197

Online: libertymutualgroup.com/privacy-policy/data-request

Mail: Attn: Privacy Office
Liberty Mutual Insurance Company
175 Berkeley St., 6th Floor
Boston, MA 02116

You may also make a verifiable consumer request on behalf of your minor child.

You or your authorized agent may only make a verifiable consumer request for access or data deletion twice within a twelve (12) month period. The verifiable consumer request must provide sufficient information that allows Liberty Mutual to reasonably verify that you are the person about whom Liberty Mutual collected personal data or an authorized representative of such person; and describe your request with sufficient detail that allows Liberty Mutual to properly understand, evaluate, and respond to it. For more information about how Liberty Mutual will verify your identity and how an authorized agent may make a request on your behalf, go to libertymutual.com/privacy and click on the California Supplemental Privacy Policy.

Response Timing

Liberty Mutual will respond to a verifiable consumer request within forty-five (45) days of its receipt. If more time is needed, Liberty Mutual will inform you of the reason and extension period in writing.

Any disclosures that will be provided will only cover the twelve (12) month period preceding our receipt of the verifiable consumer request. If Liberty Mutual is unable to fulfill your request, you will be provided with the reason that the request cannot be completed. For more information about how we will respond to requests, go to libertymutual.com/privacy and click on the California Supplemental Privacy Policy.

Rights to opt in and out of data selling

California consumers have the right to direct businesses not to sell your personal data (opt-out rights), and personal data of minors under 16 years of age will not be sold, as is their right, without theirs or their parents' opt-in consent. Liberty Mutual does not sell the personal data of consumers. For more information, go to libertymutual.com/privacy and click on the California Supplemental Privacy Policy.

No account needed

You do not need to create an account with Liberty Mutual to exercise your rights. Liberty Mutual will only use personal data provided in a request to review and comply with the request.

No discrimination

You have the right not to be discriminated against for exercising any of your CCPA rights. Unless permitted by the CCPA, exercising your rights will not cause Liberty Mutual to:

- Deny you goods or services;
- Charge you different prices or rates for goods or services, including through granting discounts or other benefits, or imposing penalties;
- Provide you a different level or quality of goods or services; or
- Suggest that you may receive a different price or rate for goods or services, or a different level or quality of goods or services.

Will Liberty Mutual Update This Privacy Notice?

We reserve the right to make changes to this notice at any time and for any reason. The updated version of this policy will be effective once it is accessible. You are responsible for reviewing this policy to stay informed of any changes or updates.

Who Do I Contact Regarding Privacy?

If you have any questions or comments about this Notice or the Supplemental CCPA Notice, your rights, or are requesting the Notice in an alternative format, please do not hesitate to contact Liberty Mutual at:

Phone: 800-344-0197
Email: privacy@libertymutual.com
Postal Address: Attn: Privacy Office
Liberty Mutual Insurance Company
175 Berkeley St., 6th Floor
Boston, MA 02116

IMPORTANT NOTICE TO POLICYHOLDER CONCERNING YOUR POLICY NON-CUMULATION OF LIABILITY (SAME OCCURRENCE)

This notice contains a brief summary of coverage changes made to your policy.

Please read your policy and review your Declarations page for complete coverage information. No coverage is provided by this notice, nor can it be construed to replace any provisions of your policy. If there are discrepancies between your policy and this notice, the provisions of the policy shall prevail.

Should you have questions after reviewing the changes outlined below, please contact your independent agent.

SUMMARY OF POLICY CHANGE

- ***If your renewal policy contains one of the following endorsements:***
 - ***22-112 (01/07) Non-Cumulation Of Liability (Same Occurrence) – modifies the Commercial General Liability Coverage Part***
 - ***14-267 (01/07) Non-Cumulation Of Liability (Same Occurrence) – modifies the Commercial Umbrella Liability Coverage Part***
 - ***14-267CA (01/07) Non-Cumulation Of Liability (Same Occurrence) – modifies the Commercial Umbrella/Excess Liability Policy***

and your prior policy did not contain a similar endorsement, then the following change applies to your policy:

COVERAGE REDUCTION

The Limits of Insurance section of your policy is amended to expressly state that, if one occurrence causes bodily injury or property damage during the policy period and during the policy period of one or more prior, or future, policies issued to you by us, then this policy's Each Occurrence Limit will be reduced by the amount of each payment made by us under the other policies because of such occurrence. While this change is a reinforcement of coverage intent, it may result in a decrease in coverage in jurisdictions where courts have ruled that limits of insurance can be triggered under multiple policy periods. For that reason, out of caution, we are listing it as a coverage reduction.

JURISDICTIONAL BOILER AND PRESSURE VESSEL INSPECTIONS

Most jurisdictions (cities or states) are governed by laws and regulations that require owners of boilers and pressure vessels to have their equipment inspected on a routine basis. Jurisdictions require that equipment is installed and operated according to these regulations, and it is the equipment breakdown engineering inspector's responsibility to verify the equipment complies with all requirements.

Liberty Mutual Equipment Breakdown is a National Board Accredited Authorized Inspection Agency. This designation is recognized by authorities having jurisdictions in the U.S. & provinces of Canada and gives Liberty Mutual commissioned inspectors the ability to perform jurisdictionally required inspection on boilers and pressure vessels at insured locations. We have field inspectors strategically located throughout the U.S. to perform boiler and pressure vessel inspection for our customers and clients.

To request a Jurisdictional Inspection please:

- **Call the LMEB Hotline (877) 526-0020**

Or

- **Email your request to LMEBInspections@Libertymutual.com**

The assigned EB Risk Engineer will call to schedule within 24 – 48 hours. When requesting an inspection please include the following:

- Current Policy Number
- Location Address
- Contact Name
- Contact Phone Number and/or Email Address

EFFECTIVE DATE: 11/16/2020

Policy Number: CBP 8526587	Prior Policy:
Billing Type: AGENCY BILL	
Coverage Is Provided In THE NETHERLANDS INSURANCE COMPANY-A STOCK COMPANY	
Named Insured and Mailing Address: ACADEMY OF DOVER 104-106 SALISBURY ROAD DOVER DE 19904	Agent: L & W INSURANCE PO BOX 918 DOVER DE 19903-0918 Agent Code: 5290824 Agent Phone: (302)-674-3500

COMMON POLICY DECLARATIONS

In return for the payment of premium, and subject to all the terms of this policy, we agree with you to provide the insurance as stated in this policy.

POLICY PERIOD: From : 11/16/2020 To: 11/16/2021 at 12:01 AM Standard Time at your mailing address shown above.

FORM OF BUSINESS: SCHOOL

BUSINESS DESCRIPTION: SCHOOL

This policy consists of the following coverage parts for which a premium is indicated. This premium may be subject to adjustment.

	PREMIUM
Commercial Property Coverage Part	\$ 3,150.00
Commercial Crime Coverage Part	\$ 491.00
Commercial General Liability Coverage Part	INCLUDED
Employee Benefits Liability Coverage Part	INCLUDED
Employers Stop Gap Liability Coverage Part	INCLUDED
School Leaders Errors and Omissions Liability Coverage Part	INCLUDED
Sexual Misconduct and Molestation Liability Coverage Part	INCLUDED
Total Premium for all Liability Coverage Parts	\$ 13,483.00
Terrorism Risk Insurance Act	\$ 163.00
 Total Policy Premium	 \$ 17,287.00

FORMS AND ENDORSEMENTS

Forms and Endorsements made a part of this policy at time of issue:

Applicable Forms and Endorsements are omitted if shown in specific Coverage Part/Coverage Form Declarations

Form Number	Description
IL0003	- 0907 CALCULATION OF PREMIUM

17-57 (06/94)

INSURED COPY

COMMON POLICY DECLARATIONS (continued)

FORMS AND ENDORSEMENTS

Forms and Endorsements made a part of this policy at time of issue:

Applicable Forms and Endorsements are omitted if shown in specific Coverage Part/Coverage Form Declarations

Form Number	Description
IL0017	- 1198 COMMON POLICY CONDITIONS
IL0237	- 0702 DELAWARE CHANGES-TERMINATION PROVISIONS
IL0952	- 0115 CAP ON LOSSES FROM CERTIFIED ACTS OF TERRORISM
17-357	- 0115 CAP ON LOSSES FROM CERTIFIED ACTS OF TERRORISM
17-363	- 0115 EXCLUSION OF PUNITIVE DAMAGES RELATED TO TERRORISM
17-366	- 1202 WAR LIABILITY EXCLUSION
17-517	- 0517 PUBLIC ENTITY IMMUNITY AND TORT CAP PRESERVATION
CG2170	- 0115 CAP ON LOSSES FROM CERTIFIED ACTS OF TERRORISM
CG2176	- 0115 EXCLUSION OF PUNITIVE DAMAGES
IL0021	- 0702 NUCLEAR ENERGY LIABILITY EXCLUSION (BROAD FORM)
17-59	- 0694 DECLARATIONS EXTENSION

Countersigned: By _____
Authorized Representative Date

THESE DECLARATIONS TOGETHER WITH THE COMMON POLICY CONDITIONS, COVERAGE PART DECLARATIONS, COVERAGE PART COVERAGE FORM(S) AND FORMS AND ENDORSEMENTS, IF ANY, ISSUED TO FORM A PART THEREOF, COMPLETE THE ABOVE NUMBERED POLICY.

Includes copyrighted material of Insurance Services Office, Inc. with its permission. Copyright, Insurance Services Office, Inc. 1982,1983, 1984, 1985.

Date Issued: 11/19/2020

Forming a part of

Policy Number: CBP 8526587	
Coverage Is Provided In THE NETHERLANDS INSURANCE COMPANY-A STOCK COMPANY	
Named Insured: ACADEMY OF DOVER	Agent: L & W INSURANCE Agent Code: 5290824 Agent Phone: (302)-674-3500

**DECLARATIONS EXTENSION
STOP GAP EMPLOYERS LIABILITY 22-162 (05 10)
COVERAGE ENDORSEMENT**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE FORM

SCHEDULE

Limits of Insurance

**Bodily Injury By Accident
\$1,000,000 Each Accident**

**Bodily Injury by Disease
\$1,000,000 Aggregate Limit**

**Bodily Injury by Disease
\$1,000,000 Each Employee**

**State or Territory
DE**

(If no entry appears above, the information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

**A. The following is added to Section I -
Coverages:**

COVERAGE - STOP GAP - EMPLOYERS LIABILITY

1. Insuring Agreement

DECLARATIONS EXTENSION (continued)

a. We will pay those sums that the insured becomes legally obligated by law to pay as damages because of "bodily injury by accident" or "bodily injury by disease" to your "employee" to which this insurance applies. We will have the right and duty to defend the insured against any "suit" seeking those damages. However, we will have no duty to defend the insured against any "suit" seeking damages to which this insurance does not apply. We may, at our discretion, investigate any accident and settle any claim or "suit" that may result. But:

- (1) The amount we will pay for damages is limited as described in Section III - Limits Of Insurance; and
- (2) Our right and duty to defend end when we have used up the applicable limit of insurance in the payment of judgments or settlements under this coverage. No other obligation or liability to pay sums or perform acts or services is covered unless explicitly provided for under Supplementary Payments.

b. This insurance applies to "bodily injury by accident" or "bodily injury by disease" only if:

- (1) The:
 - (a) "Bodily injury by accident" or "bodily injury by disease" takes place in the "coverage territory";
 - (b) "Bodily injury by accident" or "bodily injury by disease" arises out of and in the course of the injured "employee's" employment by you; and
 - (c) "Employee", at the time of the injury, was covered under a worker's compensation policy and subject to a "workers compensation law"; and

NEW BUSINESS

Forming a part of

Policy Number: CBP 8526587

Coverage Is Provided In THE NETHERLANDS INSURANCE COMPANY-A STOCK COMPANY

**Named Insured:
ACADEMY OF DOVER**

**Agent:
L & W INSURANCE**

Agent Code: 5290824

Agent Phone: (302)-674-3500

DECLARATIONS EXTENSION (continued)

(2) The:

(a) "Bodily injury by accident" is caused by an accident that occurs during the policy period; or

(b) "Bodily injury by disease" is caused by or aggravated by conditions of employment by you and the injured "employee's" last day of last exposure to the conditions causing or aggravating such "bodily injury by disease" occurs during the policy period.

(c) The damages we will pay, where recovery is permitted by law, include damages:

(1) For:

(a) Which you are liable to a third party by reason of a claim or "suit" against you by that third party to recover the damages claimed against such third party as a result of injury to your "employee";

(b) Care and loss of services; and

(c) Consequential "bodily injury by accident" or "bodily injury by disease" to a spouse, child, parent, brother or sister of the injured

"employee";

provided that these damages are the direct consequence of "bodily injury by accident" or "bodily injury by disease" that arises out of and in the course of the injured "employee's" employment by you; and

- (2) Because of "bodily injury by accident" or "bodily injury by disease" to your "employee" that arises out of and in the course of employment, claimed against you in a capacity other than as employer.

2. Exclusions

This insurance does not apply to:

a. Intentional Injury

"Bodily injury by accident" or "bodily injury by disease" intentionally caused or aggravated by you, or "bodily injury by accident" or "bodily injury by disease" resulting from an act which is determined to have been committed by you if it was reasonable to believe that an injury is substantially certain to occur.

b. Fines Or Penalties

Any assessment, penalty, or fine levied by any regulatory inspection agency or authority.

c. Statutory Obligations

Any obligation of the insured under a workers' compensation, disability benefits or unemployment compensation law or any similar law.

d. Contractual Liability

Liability assumed by you under any

Forming a part of

Policy Number: CBP 8526587

Coverage Is Provided In THE NETHERLANDS INSURANCE COMPANY-A STOCK COMPANY

Named Insured:
ACADEMY OF DOVER

Agent:
L & W INSURANCE

Agent Code: 5290824

Agent Phone: (302)-674-3500

DECLARATIONS EXTENSION (continued)

contractor agreement.

e. Violation Of Law

"Bodily injury by accident" or "bodily injury by disease" suffered or caused by any employee while employed in violation of law with your actual knowledge or the actual knowledge of any of your "executive officers".

f. Termination, Coercion Or Discrimination

Damages arising out of coercion, criticism, demotion, evaluation, reassignment, discipline, defamation, harassment, humiliation, discrimination against or termination of any "employee", or arising out of other employment or personnel decisions concerning the insured.

g. Failure To Comply With "Workers Compensation Law"

"Bodily injury by accident" or "bodily injury by disease" to an "employee" when you are:

- (1) Deprived of common law defenses; or
- (2) Otherwise subject to penalty; because of your failure to secure your obligations or other failure to comply with any "workers compensation law".

h. Violation Of Age Laws Or Employment Of Minors

"Bodily injury by accident" or "bodily injury by disease" suffered or caused by any person:

- (1) Knowingly employed by you in violation of any law as to age; or
- (2) Under the age of 14 years, regardless of any such law.

i. Federal Laws

Any premium, assessment, penalty, fine, benefit, liability or other obligation imposed by or granted pursuant to:

- (1) The Federal Employer's Liability Act (45 USC Section 51-60);
- (2) The Non-appropriated Fund Instrumentalities Act (5 USC Sections 8171-8173);
- (3) The Longshore and Harbor Workers' Compensation Act (33 USC Sections 910-950);
- (4) The Outer Continental Shelf Lands Act (43 USC Section 1331-1356);
- (5) The Defense Base Act (42 USC Sections 1651-1654);
- (6) The Federal Coal Mine Health and Safety Act of 1969 (30 USC Sections 901-942);
- (7) The Migrant and Seasonal Agricultural Worker Protection Act (29 USC Sections 1801-1872);
- (8) Any other workers compensation, unemployment compensation or disability laws or any similar law; or

NEW BUSINESS

Forming a part of

Policy Number: CBP 8526587

Coverage Is Provided In THE NETHERLANDS INSURANCE COMPANY-A STOCK COMPANY

**Named Insured:
ACADEMY OF DOVER**

**Agent:
L & W INSURANCE**

Agent Code: 5290824

Agent Phone: (302)-674-3500

DECLARATIONS EXTENSION (continued)

(9) Any subsequent amendments to the laws listed above.

j. Punitive Damages

Multiple, exemplary or punitive damages.

k. Crew Members

"Bodily injury by accident" or "bodily injury by disease" to a master or member of the crew of any vessel or any member of the flying crew of an aircraft.

B. The Supplementary Payments provisions apply to Coverage - Stop Gap Employers Liability as well as to Coverages A and B.

C. For the purposes of this endorsement, Section II - Who Is An Insured, is replaced by the following:

If you are designated in the Declarations as:

- 1. An individual, you and your spouse are insureds, but only with respect to the conduct of a business of which you are the sole owner.**
- 2. A partnership or joint venture, you are an insured. Your members, your partners, and their spouses are also insureds, but only with respect to the conduct of your business.**

3. A limited liability company, you are an insured. Your members are also insureds, but only with respect to the conduct of your business. Your managers are insureds, but only with respect to their duties as your managers.

4. An organization other than a partnership, joint venture or limited liability company, you are an insured. Your "executive officers" and directors are insureds, but only with respect to their duties as your officers or directors. Your stockholders are also insureds, but only with respect to their liability as stockholders.

No person or organization is an insured with respect to the conduct of any current or past partnership, joint venture or limited liability company that is not shown as a Named Insured in the Declarations.

D. For the purposes of this endorsement, Section III Limits Of Insurance, is replaced by the following:

1. The Limits of Insurance shown in the Schedule of this endorsement and the rules below fix the most we will pay regardless of the number of:

- a. Insureds;
- b. Claims made or "suits" brought; or
- c. Persons or organizations making claims or bringing "suits".

2. The "Bodily Injury By Accident" - Each Accident Limit shown in the Schedule of this endorsement is the most we will pay for all damages covered by this insurance because of "bodily injury by accident" to one or more "employees" in any one accident.

3. The "Bodily Injury By Disease" - Aggregate

NEW BUSINESS

Forming a part of

Policy Number: CBP 8526587

Coverage Is Provided In THE NETHERLANDS INSURANCE COMPANY-A STOCK COMPANY

**Named Insured:
ACADEMY OF DOVER**

**Agent:
L & W INSURANCE**

Agent Code: 5290824

Agent Phone: (302)-674-3500

DECLARATIONS EXTENSION (continued)

Limit shown in the Schedule of this endorsement is the most we will pay for all damages covered by this insurance and arising out of "bodily injury by disease", regardless of the number of "employees" who sustain "bodily injury by disease".

4. Subject to Paragraph D.3. of this endorsement, the "Bodily Injury By Disease" - Each "Employee" Limit shown in the Schedule of this endorsement is the most we will pay for all damages because of "bodily injury by disease" to any one "employee".

The limits of the coverage apply separately to each consecutive annual period and to any remaining period of less than 12 months, starting with the beginning of the policy period shown in the Declarations, unless the policy period is extended after issuance for an additional period of less than 12 months. In that case, the additional period will be deemed part of the last preceding period for purposes of determining the Limits of Insurance.

- E. For the purposes of this endorsement, Condition 2. - Duties In The Event Of Occurrence, Claim Or Suit of the Conditions Section IV is deleted and replaced by the following:

2. Duties In The Event Of Injury, Claim or Suit

- a. You must see to it that we or our agent are notified as soon as practicable of a "bodily injury by accident" or "bodily

DECLARATIONS EXTENSION (continued)

injury by disease" which may result in a claim. To the extent possible, notice should include:

- (1) How, when and where the "bodily injury by accident" or "bodily injury by disease" took place;**
- (2) The names and addresses of any injured persons and witnesses; and**
- (3) The nature and location of any injury.**

b. If a claim is made or "suit" is brought against any insured, you must:

- (1) Immediately record the specifics of the claim or "suit" and the date received; and**
- (2) Notify us as soon as practicable.**

You must see to it that we receive written notice of the claim or "suit" as soon as practicable.

c. You and any other involved insured must:

- (1) Immediately send us copies of any demands, notices, summonses or legal papers received in connection with the injury, claim, proceeding or "suit";**
- (2) Authorize us to obtain records and other information;**
- (3) Cooperate with us and assist us, as we may request, in the investigation or settlement of the claim or defense against the "suit";**
- (4) Assist us, upon our request, in the enforcement of any right against any person or organization which may be liable to the insured because of injury to which this insurance may also apply; and**

NEW BUSINESS

Forming a part of

Policy Number: CBP 8526587

Coverage Is Provided In THE NETHERLANDS INSURANCE COMPANY-A STOCK COMPANY

**Named Insured:
ACADEMY OF DOVER**

**Agent:
L & W INSURANCE**

Agent Code: 5290824

Agent Phone: (302)-674-3500

DECLARATIONS EXTENSION (continued)

(5) Do nothing after an injury occurs that would interfere with our right to recover from others.

d. No insured will, except at that insured's own cost, voluntarily make a payment, assume any obligation, or incur any expense, other than for first aid, without our consent.

F. For the purposes of this endorsement, Paragraph 4. of the Definitions Section is replaced by the following:

4. "Coverage territory" means:

a. The United States of America (including its territories and possessions), Puerto Rico and Canada;

b. International waters or airspace, but only if the injury or damage occurs in the course of travel or transportation between any places included in a. above; or

c. All other parts of the world if the injury or damage arises out of the activities of a person whose home is in the territory described in a. above, but who is away for a short time on your business; provided the insured's responsibility to pay damages is determined in the United States (including its territories and possessions), Puerto Rico, or Canada, in a

DECLARATIONS EXTENSION (continued)

suit on the merits according to the substantive law in such territory, or in a settlement we agree to.

G. The following are added to the Definitions Section:

1. "Workers Compensation Law" means the Workers Compensation Law and any Occupational Disease Law of each state or territory named in the Schedule of this endorsement.

This does not include provisions of any law providing non-occupational disability benefits.

2. "Bodily injury by accident" means bodily injury, sickness or disease sustained by a person, including death, resulting from an accident. A disease is not "bodily injury by accident" unless it results directly from "bodily injury by accident".

3. "Bodily injury by disease" means a disease sustained by a person, including death. "Bodily injury by disease" does not include a disease that results directly from an accident.

H. For the purposes of this endorsement, the definition of "bodily injury" does not apply.

Date Issued:11/19/2020

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

DELAWARE CHANGES – TERMINATION PROVISIONS

This endorsement modifies insurance provided under the following:

CAPITAL ASSETS PROGRAM (OUTPUT POLICY) COVERAGE PART
COMMERCIAL GENERAL LIABILITY COVERAGE PART
COMMERCIAL PROPERTY COVERAGE PART
EMPLOYMENT-RELATED PRACTICES LIABILITY COVERAGE PART
FARM COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
POLLUTION LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART
PROFESSIONAL LIABILITY COVERAGE PART

A. With respect to the:

Farm Property-Farm Dwellings, Appurtenant Structures and Household Personal Property Coverage Form; Commercial Property Coverage Part; and Capital Assets Program (Output Policy) Coverage Part;

if the policy covers a building that contains no more than 4 dwelling units, one of which is the insured's principal place of residence, or covers the insured's household personal property in a residential building, the following applies:

1. Paragraph **2.** of the **Cancellation Common Policy Condition** is replaced by the following:
 2. We may cancel this policy by mailing or delivering to the first Named Insured written notice of cancellation along with the reasons for cancellation at least:
 - a. 10 days before the effective date of cancellation if we cancel for nonpayment of premium; or
 - b. 30 days before the effective date of cancellation if we cancel for any other reason.

After coverage has been in effect for more than 60 days or after the effective date of a renewal of this policy, no notice of cancellation will be issued by us unless it is based on at least one of the following reasons:

- (1) Nonpayment of premium;
- (2) Discovery of fraud or material misrepresentation made by you or with your knowledge in obtaining the policy, continuing the policy, or in presenting a claim under the policy;
- (3) Discovery of willful or reckless acts or omissions on your part that increase any hazard insured against;
- (4) The occurrence of a change in the risk that substantially increases any hazard insured against after insurance coverage has been issued or renewed;
- (5) A violation of any local fire, health, safety, building, or construction regulation or ordinance with respect to any covered property or its occupancy that substantially increases any hazard insured against;
- (6) A determination by the Insurance Commissioner that the continuation of the policy would place us in violation of the Delaware insurance laws; or
- (7) Real property taxes owing on the insured property have been delinquent for two or more years and continue delinquent at the time notice of cancellation is issued.

2. The following Condition is added:

NONRENEWAL

- a. If we decide not to renew this policy, we will mail or deliver written notice of nonrenewal to the first Named Insured, at least 30 days before the expiration date, or the anniversary date if this is a policy written for a term of more than one year or with no fixed expiration date.
- b. Any notice of nonrenewal will include the reason(s) for nonrenewal and will be mailed or delivered to the first Named Insured at the last mailing address known to us.
- c. If notice is mailed, proof of mailing will be sufficient proof of notice.

3. If Cancellation Changes **CP 02 99** is attached to the Commercial Property Coverage Part, Paragraph **E.2.** of that form is replaced by the following:

- 2. Pay property taxes that are owing and have been outstanding for more than two years following the date due, except that this provision will not apply where you are in a bona fide dispute with the taxing authority regarding payment of such taxes.

B. With respect to the:

- CAPITAL ASSETS PROGRAM COVERAGE FORM (OUTPUT POLICY)
- COMMERCIAL GENERAL LIABILITY COVERAGE FORM;
- COMMERCIAL PROPERTY – LEGAL LIABILITY COVERAGE FORM;
- COMMERCIAL PROPERTY – MORTGAGE HOLDER'S ERRORS AND OMISSIONS COVERAGE FORM;
- EMPLOYMENT-RELATED PRACTICES LIABILITY COVERAGE FORM;
- FARM LIABILITY COVERAGE FORM;
- LIQUOR LIABILITY COVERAGE FORM;
- POLLUTION LIABILITY COVERAGE FORM;
- PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE FORM; and
- PROFESSIONAL LIABILITY COVERAGE FORM;

the following Condition is added and supersedes any other condition to the contrary:

NONRENEWAL

- 1. If we decide not to renew this policy, we will mail or deliver written notice of nonrenewal to the first Named Insured, at least 60 days before the expiration date, or the anniversary date if this is a policy written for a term of more than one year or with no fixed expiration date.
- 2. Any notice of nonrenewal will be mailed or delivered to the first Named Insured at the last mailing address known to us.
- 3. If notice of nonrenewal is mailed, it will be sent by certified mail.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

CALCULATION OF PREMIUM

This endorsement modifies insurance provided under the following:

CAPITAL ASSETS PROGRAM (OUTPUT POLICY) COVERAGE PART
COMMERCIAL AUTOMOBILE COVERAGE PART
COMMERCIAL GENERAL LIABILITY COVERAGE PART
COMMERCIAL INLAND MARINE COVERAGE PART
COMMERCIAL PROPERTY COVERAGE PART
CRIME AND FIDELITY COVERAGE PART
EMPLOYMENT-RELATED PRACTICES LIABILITY COVERAGE PART
EQUIPMENT BREAKDOWN COVERAGE PART
FARM COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE PART
POLLUTION LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART
PROFESSIONAL LIABILITY COVERAGE PART
RAILROAD PROTECTIVE LIABILITY COVERAGE PART

The following is added:

The premium shown in the Declarations was computed based on rates in effect at the time the policy was issued. On each renewal, continuation, or anniversary of the effective date of this policy, we will compute the premium in accordance with our rates and rules then in effect.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**CAP ON LOSSES FROM CERTIFIED ACTS OF
TERRORISM**

This endorsement modifies insurance provided under the following:

BOILER AND MACHINERY COVERAGE PART
COMMERCIAL INLAND MARINE COVERAGE PART
COMMERCIAL PROPERTY COVERAGE PART
EQUIPMENT BREAKDOWN COVERAGE PART
FARM COVERAGE PART
STANDARD PROPERTY POLICY

A. Cap On Certified Terrorism Losses

“Certified act of terrorism” means an act that is certified by the Secretary of the Treasury, in accordance with the provisions of the federal Terrorism Risk Insurance Act, to be an act of terrorism pursuant to such Act. The criteria contained in the Terrorism Risk Insurance Act for a “certified act of terrorism” include the following:

1. The act resulted in insured losses in excess of \$5 million in the aggregate, attributable to all types of insurance subject to the Terrorism Risk Insurance Act; and
2. The act is a violent act or an act that is dangerous to human life, property or infrastructure and is committed by an individual or individuals as part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the United States Government by coercion.

If aggregate insured losses attributable to terrorist acts certified under the Terrorism Risk Insurance Act exceed \$100 billion in a calendar year and we have met our insurer deductible under the Terrorism Risk Insurance Act, we shall not be liable for the payment of any portion of the amount of such losses that exceeds \$100 billion, and in such case insured losses up to that amount are subject to pro rata allocation in accordance with procedures established by the Secretary of the Treasury.

B. Application Of Exclusions

The terms and limitations of any terrorism exclusion, or the inapplicability or omission of a terrorism exclusion, do not serve to create coverage for any loss which would otherwise be excluded under this Coverage Part or Policy, such as losses excluded by the Nuclear Hazard Exclusion or the War And Military Action Exclusion.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

PUBLIC ENTITY IMMUNITY AND TORT CAP PRESERVATION ENDORSEMENT

This endorsement modifies all policies and endorsements providing liability coverage, including, but not limited to, the following:

COMMERCIAL AUTO COVERAGE PART
COMMERCIAL GENERAL LIABILITY COVERAGE PART
EMPLOYMENT PRACTICES LIABILITY COVERAGE PART
LAW ENFORCEMENT LIABILITY COVERAGE PART
LAW ENFORCEMENT PROFESSIONAL LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
PUBLIC OFFICIALS LIABILITY COVERAGE PART
SCHOOL LEADERS ERRORS AND OMISSIONS LIABILITY COVERAGE PART
SEXUAL MISCONDUCT OR MOLESTATION LIABILITY COVERAGE PART

With respect to the amendments to the Coverage Parts made by this endorsement, the provisions of the Coverage Parts apply unless modified by this endorsement.

In consideration of our agreement to issue this policy for the premium charged:

A. The following is added to the **Insuring Agreement** or **Coverage** section as applicable:

The procurement of this insurance does not:

1. Waive or otherwise limit any immunity, defense or limitation on liability or damages available pursuant to "Immunity or Tort Cap Law"; or
2. Expand or increase the liability of any individual or entity beyond the liability that such individual or entity would be subject to if you had not procured this insurance.

B. The following exclusion is added:

To the fullest extent allowed by law, this insurance does not apply to any "Public Entity Liability" for which any insured would otherwise be immune or have no liability pursuant to an "Immunity or Tort Cap Law".

C. The following is added to the **Limits of Insurance** section:

1. For any "Public Entity Liability" for which an insured is not fully immune pursuant to "Immunity or Tort Cap Law", but instead is subject to limits or caps pursuant to any applicable "Immunity or Tort Cap Law", this policy will pay no more than the applicable federal or state law limit or cap, subject to the applicable Limits of Insurance shown on the Declarations page or applicable schedule of this policy.
2. For any "Public Entity Liability" for which an insured is neither fully immune pursuant to "Immunity or Tort Cap Law", nor subject to limits or caps pursuant to "Immunity or Tort Cap Law", the Limits of Liability apply as shown on the Declarations page or applicable schedule of this policy.

D. For the purposes of this endorsement the following definition is added:

"Immunity or Tort Cap Law" means any common law, or federal or state law, including, but not limited to, sovereign immunity or governmental immunity provided by common law or by any applicable federal or state tort claims act.

"Public Entity Liability" means any liability, damages, loss, injury, demand, claim, or suit as may be defined or used in any applicable Coverage Part.

COMMON POLICY CONDITIONS

All Coverage Parts included in this policy are subject to the following conditions.

A. Cancellation

1. The first Named Insured shown in the Declarations may cancel this policy by mailing or delivering to us advance written notice of cancellation.
2. We may cancel this policy by mailing or delivering to the first Named Insured written notice of cancellation at least:
 - a. 10 days before the effective date of cancellation if we cancel for nonpayment of premium; or
 - b. 30 days before the effective date of cancellation if we cancel for any other reason.
3. We will mail or deliver our notice to the first Named Insured's last mailing address known to us.
4. Notice of cancellation will state the effective date of cancellation. The policy period will end on that date.
5. If this policy is cancelled, we will send the first Named Insured any premium refund due. If we cancel, the refund will be pro rata. If the first Named Insured cancels, the refund may be less than pro rata. The cancellation will be effective even if we have not made or offered a refund.
6. If notice is mailed, proof of mailing will be sufficient proof of notice.

B. Changes

This policy contains all the agreements between you and us concerning the insurance afforded. The first Named Insured shown in the Declarations is authorized to make changes in the terms of this policy with our consent. This policy's terms can be amended or waived only by endorsement issued by us and made a part of this policy.

C. Examination Of Your Books And Records

We may examine and audit your books and records as they relate to this policy at any time during the policy period and up to three years afterward.

D. Inspections And Surveys

1. We have the right to:
 - a. Make inspections and surveys at any time;
 - b. Give you reports on the conditions we find; and
 - c. Recommend changes.
2. We are not obligated to make any inspections, surveys, reports or recommendations and any such actions we do undertake relate only to insurability and the premiums to be charged. We do not make safety inspections. We do not undertake to perform the duty of any person or organization to provide for the health or safety of workers or the public. And we do not warrant that conditions:
 - a. Are safe or healthful; or
 - b. Comply with laws, regulations, codes or standards.
3. Paragraphs 1. and 2. of this condition apply not only to us, but also to any rating, advisory, rate service or similar organization which makes insurance inspections, surveys, reports or recommendations.
4. Paragraph 2. of this condition does not apply to any inspections, surveys, reports or recommendations we may make relative to certification, under state or municipal statutes, ordinances or regulations, of boilers, pressure vessels or elevators.

E. Premiums

The first Named Insured shown in the Declarations:

1. Is responsible for the payment of all premiums; and
2. Will be the payee for any return premiums we pay.

F. Transfer Of Your Rights And Duties Under This Policy

Your rights and duties under this policy may not be transferred without our written consent except in the case of death of an individual named insured.

If you die, your rights and duties will be transferred to your legal representative but only while acting within the scope of duties as your legal representative. Until your legal representative is appointed, anyone having proper temporary custody of your property will have your rights and duties but only with respect to that property.

Forming a part of

Policy Number: CBP 8526587

Coverage Is Provided In THE NETHERLANDS INSURANCE COMPANY-A STOCK COMPANY

Named Insured:

ACADEMY OF DOVER

Agent:

L & W INSURANCE

Agent Code: 5290824

Agent Phone: (302)-674-3500

COMMERCIAL PROPERTY COVERAGE PART DECLARATIONS

DESCRIPTION OF PREMISES

Prem. No.	Bldg. No.	Location Occupancy, Construction/Fire Protection
1	1	104-106 SALISBURY ROAD DOVER DE 19904 ACADEMY OF DOVER FRAME

COVERAGES PROVIDED:

Insurance at the described premises applies only for coverages for which a limit of insurance is shown or for which an entry is made. (The Coinsurance column reflects Coinsurance %, Extra Expense %, Limits on Loss Payment or Value Reporting Symbol.)

Prem. No.	Bldg. No.	Coverage	Limit of Insurance	Causes of Loss Form	Coinsurance
1	1	YOUR BUSINESS PERSONAL PROPERTY	\$ 708,850	SPECIAL	100%
1	1	BUSINESS INCOME AND EXTRA EXPENSE OTHER THAN "RENTAL VALUE"	\$ 1,500,000	SPECIAL	100%

OPTIONAL COVERAGES:

Prem. No.	Bldg. No.	Coverage	Agreed Value Amount Expiration Date	Replacement Cost	Inflation Guard
1	1	YOUR BUSINESS PERSONAL PROPERTY	\$ 708,850 11/16/21	INCLUDED	

* Replacement cost for Your Business Personal Property also applies to Stock if an asterisk (*) is present.

DEDUCTIBLE: \$ 2,500

MORTGAGE HOLDERS: NONE

FORMS AND ENDORSEMENTS

Forms and Endorsements applying to this Coverage Part and made part of this policy:

Form Number	Description
42-62 - 0703	PROPERTY EXTENSION ENDORSEMENT
CF175 - 0186	QUICK REFERENCE-COMMERCIAL PROPERTY COVERAGE PART
CP0010 - 0402	BUILDING AND PERSONAL PROPERTY COVERAGE FORM

21-7 (07/03)

INSURED COPY

FORMS AND ENDORSEMENTS

Forms and Endorsements applying to this Coverage Part and made part of this policy:

Form Number		Description
CP0030	- 0402	BUSINESS INCOME (AND EXTRA EXPENSE) COVERAGE FORM
CP0090	- 0788	COMMERCIAL PROPERTY CONDITIONS
CP0140	- 0706	EXCLUSION OF LOSS DUE TO VIRUS OR BACTERIA
CP0299	- 1185	CANCELLATION CHANGES
CP1030	- 0402	CAUSES OF LOSS - SPECIAL FORM
IL0237	- 0702	DELAWARE CHANGES-TERMINATION PROVISIONS

Includes copyrighted material of Insurance Services Office, Inc. with its permission. Copyright, Insurance Services Office, Inc. 1982,1983, 1984, 1985.

Date Issued: 11/19/2020

Policy Number: CBP 8526587

Coverage Is Provided In THE NETHERLANDS INSURANCE COMPANY-A STOCK COMPANY

Named Insured:
ACADEMY OF DOVERAgent:
L & W INSURANCE

Agent Code: 5290824

Agent Phone: (302)-674-3500

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**VIOLENT EVENT RESPONSE COVERAGE FOR SCHOOLS**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Aggregate Limit – Response Expenses and Loss	\$	300,000
Each Violent Event Limit – Response Expenses and Loss	\$	300,000
Each Person Limit – Loss	\$	25,000
Each Person Limit – Death Benefits	\$	15,000

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

A. COVERAGEThe following Violent Event Response Coverage is added to **SECTION I – COVERAGES**:**COVERAGE D VIOLENT EVENT RESPONSE COVERAGE****1. Insuring Agreement****a. Response Expenses**

We will pay your “response expenses” that result from a “violent event” to which this insurance applies but only if the “response expenses” are incurred and reported to us within one year of the “violent event”.

b. Loss

We will pay “loss” that results from a “violent event” to which this insurance applies but only if:

- (1)** The “loss” is incurred and reported to us within one year of the “violent event”; and
- (2)** For “death benefits”, we receive a death certificate, or other evidence of death acceptable to us, within one year of the “violent event”.

- c.** The amount we will pay under paragraphs **a.** and **b.** above is limited as described in **SECTION – III LIMITS OF INSURANCE**. No other obligation or liability to pay sums or perform acts or services is covered.

Includes copyrighted material of Insurance Services Office, with its permission.

2. This insurance applies to a “violent event” only if the “violent event”:
 - a. Commences during the policy period; and
 - b. Takes place in the “coverage territory” on premises that you own or lease, or during activities that you sponsor.

3. Exclusions

This insurance does not apply to:

a. War

“Response expenses” or “loss” arising directly or indirectly out of:

- (1) War, including undeclared or civil war; or
- (2) Warlike action by a military force, including action in hindering or defending against an actual or threatened attack, by any government, sovereign or other authority using military personnel or other agents; or
- (3) Insurrection, rebellion, revolution, usurped power, or action taken by governmental authority in hindering or defending against any of these.

b. Nuclear, Biological Or Chemical Events

“Response expenses” or “loss” arising directly or indirectly out of:

- (1) A “violent event” that is carried out by means of dispersal or application of radioactive material, or through the use of a nuclear weapon or device that involves or produces a nuclear reaction, nuclear radiation or radioactive contamination; or
- (2) A release of radioactive material, and it appears that one purpose of the “violent event” was to release such material; or
- (3) A “violent event” is carried out by means of the dispersal or application of pathogenic or poisonous biological or chemical materials; or
- (4) A release of pathogenic or poisonous biological or chemical materials, and it appears that one purpose of the “violent event” was to release such materials.

c. Sexual Misconduct And Molestation

“Response expenses” or “loss” arising directly or indirectly out of:

- (1) Any actual or alleged sexual misconduct or sexual molestation of any person; and
- (2) Any allegations relating thereto that:
 - (a) An insured negligently employed, investigated, trained, supervised, reported to proper authorities or failed to so report, or retained a person whose conduct would be excluded by (a) above, or
 - (b) Are based on an alleged practice, custom or policy, including but not limited to any allegation that a person’s civil rights have been violated.

d. Suicide Or Self-Inflicted Injury

“Death benefits” for an insured who commits suicide, attempts suicide, or intentionally self-inflicts injury, while sane or insane.

e. Defense Of A Claim

The defense of a claim or “suit” against an insured for liability arising out of a “violent event”.

f. Third Party Damages, Fines And Penalties

Any compensatory damages, fines, penalties, punitive or exemplary or other non-compensatory damages imposed upon the insured.

Includes copyrighted material of Insurance Services Office, with its permission.

g. Pollution

“Response expenses” or “loss” arising directly or indirectly out of any:

- (1) Request, demand, order, statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of, “pollutants”; or
- (2) Claim or “suit” by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of “pollutants”.

h. Asbestos

“Response expenses” or “loss” arising directly or indirectly out of any:

- (1) Request, demand, order, or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of asbestos, asbestos contained in goods, products or materials, asbestos fibers or asbestos dust; or
- (2) Claim or “suit” by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of asbestos, asbestos contained in goods, products or materials, asbestos fibers or asbestos dust.

i. Lead

“Response expenses” or “loss” arising directly or indirectly out of any:

- (1) Request, demand, order or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of lead or lead contained in goods, products or materials; or
- (2) Claim or “suit” by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of lead or lead contained in goods, products or materials.

j. Silica

“Response expenses” or “loss” arising directly or indirectly out of any:

- (1) Request, demand, order or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of silica in any form or any substance containing silica, either alone, or in combination with other substances or factors, whether included in a product or otherwise; or
- (2) Claim or “suit” by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of silica in any form or any substance containing silica, either alone, or in combination with other substances or factors, whether included in a product or otherwise.

k. Fungi Or Bacteria

“Response expenses” or “loss” arising directly or indirectly out of the abating, testing for, monitoring, cleaning up, removing, containing, treating, detoxifying, neutralizing, remediating or disposing of, or in any way responding to, or assessing the effects of, fungi or bacteria, by any insured or by any other person or entity. For the purpose of this exclusion, fungi means any type or form of fungus, including mold or mildew and any mycotoxins, spores, scents or byproducts produced or released by fungi.

l. Workers Compensation And Similar Laws

Any obligation of the insured under a workers’ compensation, disability benefits or unemployment compensation law or any similar law.

Includes copyrighted material of Insurance Services Office, with its permission.

m. Aircraft, Watercraft, Motorized Vehicles Or Equipment

“Response expenses” or “loss” arising out of the ownership, maintenance or use of any motorized vehicle or equipment, including, but not limited to, any aircraft, watercraft, “auto”, recreational vehicle, snowmobile, motorcycle, motorbike, golf cart, or self-propelled “mobile equipment”.

n. Perpetrators

Any perpetrator(s) of, or any person participating in the planning or execution of, any “violent event”.

o. Governmental Services

“Response expenses” for any services provided by a governmental entity. This exclusion does not apply to services that are customarily charged to the public.

B. WHO IS AN INSURED

For the purposes of coverage afforded under this endorsement, **SECTION II – WHO IS AN INSURED** is replaced by the following:

1. You.
2. Each of the following is also an insured:
 - a. Your “volunteer workers” or your “employees;
 - b. Any of your trustees or members of your Board of Governors, if you are a private charitable or educational institution;
 - c. Any of your board members or commissioners, if you are a public board or commission;
 - d. Any of your graduate teaching assistants or your student teachers;
 - e. Any of your students; or
 - f. Any parent support group and their members, if they have been specifically authorized by you.
3. Any organization you newly acquire or form, other than a partnership, joint venture or limited liability company, and over which you maintain ownership or majority interest, will qualify as a Named Insured if there is no other similar insurance available to that organization. However:
 - a. Coverage under this provision is afforded only until the 90th day after you acquire or form the organization or the end of the policy period, whichever is earlier; and
 - b. Coverage does not apply to a “violent event” that commenced before you acquired or formed the organization.

No person or organization is an insured with respect to the conduct of any current or past partnership, joint venture or limited liability company that is not shown as a Named Insured in the Declarations

C. LIMITS OF INSURANCE

For the purposes of coverage afforded under this endorsement, **SECTION III – LIMITS OF INSURANCE** is replaced by the following:

1. The Limits of Insurance shown in the Schedule of this endorsement and the rules below fix the most we will pay regardless of the number of:
 - a. Insureds; or
 - b. Claims made; or
 - c. Perpetrators; or
 - d. The number of policy periods over which the “violent event” takes place. If the “violent event” takes place over more than one policy period, the limits of insurance applicable when the “violent event” first commenced will apply.
2. The Aggregate Limit – Response Expenses and Loss is the most we will pay for the sum of all “response expenses” and “loss” arising out of all “violent events”.

Includes copyrighted material of Insurance Services Office, with its permission.

3. Subject to 2. above, the Each Violent Event Limit – Response Expenses and Loss is the most we will pay for the sum of all “response expenses” and “loss” arising out of any one “violent event”.
4. Subject to 3. above, the Each Person Limit – Loss is the most we will pay for the sum of all “loss” because of injury or death sustained by any one insured.
5. Subject to 4. above, the Each Person Limit – Death Benefits is the most we will pay for “death benefits” because of death sustained by any one insured.
6. The Limits of Insurance of this endorsement apply separately to each consecutive annual period and to any remaining period of less than 12 months, starting with the beginning of the policy period shown in the Declarations, unless the policy period is extended after issuance for an additional period of less than 12 months. In that case, the additional period will be deemed part of the last preceding period for purposes of determining the Limits of Insurance.
7. If it is likely that the Aggregate Limit – Response Expenses and Loss, or the Each Violent Event Limit – Response Expenses and Loss, will be exhausted before all “response expenses” or “loss” are paid:
 - a. “Response expenses” and “loss” stemming from a single “violent event” will be prioritized and payable in the following order:
 - (1) Death benefits;
 - (2) Medical expenses;
 - (3) Funeral expenses;
 - (4) Personal counseling services for an insured who has sustained “serious bodily injury” or was held as a “hostage”;
 - (5) Personal counseling services for the immediate family of an insured who has sustained “serious bodily injury” or was held as a “hostage”;
 - (6) Group counseling services;
 - (7) “Loss of income”;
 - (8) “Wages” of temporary personnel;
 - (9) Rental of comparable substitute premises;
 - (10) Additional expense for the transportation of your students;
 - (11) Security services; and
 - (12) Public relations consultant and related media and communication costs.
 - b. “Violent events” will be recognized in the order that they are reported to us in accordance with condition 2. **Duties In The Event Of A Violent Event** under **SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS**.
 - c. “Response expenses” and “loss” arising from a “violent event” will be paid in the order that they are reported to us in accordance with condition 2. **Duties In The Event Of A Violent Event** under **SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS**.
 - d. “Response expenses” and “loss” reported on the same day will be pro-rated if a reduction in “response expenses” and “loss” is warranted because the Aggregate Limit or Each Violent Event Limit will be exhausted.

D. CONDITIONS

For the purposes of coverage afforded under this endorsement, **SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS** is amended as follows:

1. Condition 2. is replaced by the following:
 2. **Duties In The Event Of A Violent Event**
 - a. You must see to it that we are notified as soon as practicable of a “violent event” which may result in “response expenses” or “loss”. To the extent possible, notice should include:
 - (1) How, when and where the “violent event” took place;

Includes copyrighted material of Insurance Services Office, with its permission.

- (2) The names and addresses of any injured persons and witnesses;
 - (3) The nature and location of any injury arising out of the “violent event”; and
 - (4) Copies of police reports.
- b. You and any other involved insured must:
- (1) Immediately send us copies of pertinent correspondence, demands or service invoices received in connection with “response expenses” or “loss”;
 - (2) Authorize us to obtain records and other information; and
 - (3) Cooperate with us in the investigation of a “violent event”.
2. Condition 4. is replaced by the following:

4. Other Insurance

If other valid and collectible insurance is available to the insured for a loss we cover under this Violent Event Response Coverage For Schools endorsement, our obligations are limited as follow:

a. Primary Insurance

This insurance is primary except when **b.** below applies. When this insurance is primary, our obligations are not affected unless any of the other insurance is also primary. Then, we will share with all that other insurance by the method described in **c.** below.

b. Excess Insurance

This insurance is excess over any of the other insurance, whether primary, excess, contingent, or on any other basis:

- (1) That is medical expense insurance; or
- (2) That covers rental of comparable substitute premises.

When this insurance is excess over other insurance, we will pay only our share of the amount of the loss, if any, that exceeds the sum of:

- (1) The total amount that all such other insurance would pay for the loss in the absence of this insurance; and
- (2) The total of all deductible and self-insured amounts under all that other insurance.

We will share the remaining loss, if any, with any other insurance that is not described in this Excess Insurance provision and was not bought specifically to apply in excess of the Limits of Insurance shown in the Schedule of this endorsement

c. Method Of Sharing

If all the other insurance permits contribution by equal shares, we will follow this method also. Under this approach, each insurer contributes equal amounts until it has paid its applicable limit of insurance or none of the loss remains, whichever comes first.

If any of the other insurance does not permit contribution by equal shares, we will contribute by limits. Under this method, each insurer’s share is based on the ratio of its applicable limit of insurance to the total applicable limits of insurance of all insurers.

3. The following conditions are added:

Liability Under Other Coverages Or Policies

Payment of “response expenses” or “loss” under this endorsement is not an admission of liability under other coverages provided by this policy or other policies issued to you by us or our affiliates.

Loss Payable

All claims will be payable upon receipt and acceptance by us of the following:

- a. For “death benefits”:

 - (1) A death certificate; or
 - (2) Other evidence of the death.

Includes copyrighted material of Insurance Services Office, with its permission.

- b. For claims for “loss of income”, written documentation provided by the employer of the person sustaining the “loss of income”. If a person is self-employed, then such person must provide tax returns and other necessary records to document their “loss of income”.
- c. For claims for other “loss” and “response expenses”, service invoices or other pertinent documentation.

Concealment or Fraud

We will not provide coverage to you, or any other insured, who at any time:

- a. Engaged in fraudulent conduct; or
- b. Intentionally concealed or misrepresented a material fact concerning a “violent event”, or “loss” or “response expenses” incurred under this endorsement.

E. DEFINITIONS

For the purposes of coverage afforded under this endorsement, **SECTION V – DEFINITIONS** is amended as follows:

1. Under **SECTION V – DEFINITIONS**, definition **19.** is replaced by the following:

19. “Temporary worker” means a person who is furnished to you to substitute for a permanent “employee” on leave or to meet seasonal or short-term workload conditions. “Temporary worker” does not include a substitute teacher.

2. The following are added:

- a. “Care provider” means “child”, spouse or “parent” who provides direct care to an insured.
- b. “Child” means a natural child, adopted child, foster child, stepchild or legal ward.
- c. “Death benefits” means an amount payable to the estate of a deceased insured. This does not include medical expenses or funeral expenses.
- d. “Hostages” means persons who are held captive by someone who threatens to inflict “serious bodily injury” and the circumstances of the threat are such that a reasonable person would conclude that the captives are at risk of “serious bodily injury”.
- e. “Loss” means:
 - (1) Reasonable and necessary expenses incurred by or on behalf of the insured for the following:
 - (a) Personal counseling services for up to 90 days after a “violent event” for any insured who has sustained “serious bodily injury” or was held as a “hostage”.
 - (b) Personal counseling services for up to 90 days after a “violent event” for the immediate family of any insured who has sustained “serious bodily injury” or was held as a “hostage”.
 - (c) Medical expenses including:
 - (i) First aid administered at the time of a “violent event”;
 - (ii) Necessary medical, surgical, x-ray and dental services, including physical therapy and prosthetic devices; and
 - (iii) Necessary ambulance (including emergency airlift), hospital and professional nursing services.
 - (d) Funeral expenses for a deceased insured for funeral services, preparation for burial and burial including, but not limited to, payments for any lands, services, supplies and equipment incidental to such funeral services, preparation for burial, and burial.

Includes copyrighted material of Insurance Services Office, with its permission.

(2) Sixty percent of “loss of income” for:

- (a)** An insured who sustains “serious bodily injury”; or
- (b)** An insured held as a “hostage”; or
- (c)** The “care provider” of an insured in provision **(a)** or **(b)** above;

for up to 30 days after the “violent event” and up to a maximum amount of \$3,500.

In the event that another policy, program or plan pays a portion of the “loss of income” but less than sixty percent of the “loss of income”, then we will pay the difference between that portion and the sixty percent of the “loss of income”.

(3) “Death benefits”.

“Loss” does not include any expenses incurred by you.

f. “Loss of income” means loss of actual gross income being paid on the date the person sustained “serious bodily injury” as a result of a “violent event”. “Loss of income” does not include:

- (1)** Any loss after the date on which an injured person dies; or
- (2)** Potential income that may have been received from overtime hours, on-call pay or similar types of compensation; or
- (3)** Compensation for paid sick leave, short-term disability, long-term disability, or family leave that was utilized because of the “serious bodily injury”.

g. “Parent” means a natural parent, foster parent, adoptive parent, stepparent or legal guardian.

h. “Response expenses” means reasonable and necessary expenses incurred by you for the following:

- (1)** Additional expense for the transportation of your students to and from a substitute premises for up to 30 days after a “violent event”.
- (2)** Public relations consultant and related media and communication costs for up to 30 days after a “violent event”.
- (3)** Security services for up to 15 days after a “violent event”.
- (4)** Group counseling services for an insured for up to 60 days after a “violent event”.
- (5)** Rental of comparable substitute premises for up to 30 days after the “violent event”.
- (6)** “Wages” of temporary personnel, hired to replace “employees” who have sustained “serious bodily injury” during a “violent event”, for up to 30 days after the “violent event”. Such “wages” shall not exceed the “wages” received by the “employee” being replaced.

i. “Serious bodily injury” means:

- (1)** Death of a person; or
- (2)** Other physical injury sustained by a person that causes serious impairment of body function, or permanent serious disfigurement. For the purpose of this definition, serious impairment of body function means an objectively manifested impairment of an important body function that affects the person’s general ability to lead her or his normal life.

“Serious bodily injury” does not include emotional or mental injury.

j. “Violent event” means an event that:

- (1)** Is caused by an intentional criminal act or a series of related intentional criminal acts; and
- (2)** Involves the use of a physical object, instrument, device, tool or weapon, other than the human body, for the purpose of injuring any person; and
- (3)** Results in two or more persons, other than the perpetrator, sustaining “serious bodily injury” or being held as “hostages”.

Includes copyrighted material of Insurance Services Office, with its permission.

A “violent event” starts when the first act or the first of a series of related acts begins. A “violent event” ends the earlier of the following times:

(a) When the act is concluded; or

(b) When the last in a series of acts is concluded; or

(c) When the premises have been secured by proper civil authority.

k. “Wages” means compensation you pay an “employee” for his or her work, including the cost of pension or retirement benefit plans or welfare benefit plans.

F. TERRORISM

When a terrorism endorsement is made a part of the Commercial General Liability Coverage Part, any injury or damage excluded by the endorsement is amended to include “response expenses” and “loss”.

Includes copyrighted material of Insurance Services Office, with its permission.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

PROPERTY EXTENSION ENDORSEMENT

This endorsement modifies insurance provided under the following:

BUILDING AND PERSONAL PROPERTY COVERAGE FORM
CAUSES OF LOSS – SPECIAL FORM
CAUSES OF LOSS – BROAD FORM

The following is a summary of increased limits of insurance and additional coverage provided by this endorsement. This endorsement is subject to the provisions of your policy which means that it is subject to all limitations and conditions applicable to this Coverage Part, Coverage Form or Causes of Loss Form unless specifically deleted, replaced, or modified herein. This endorsement is applicable only to those premises described in the Declarations. Coverage for loss of Business Income or Extra Expense does not apply if a loss is covered only as a result of this endorsement.

<u>Coverage Description</u>	<u>Limit of Insurance</u>
Broadened Premises	Included
Real Property of Others Required by Contract	\$ 5,000
Electronic Data	\$ 5,000
Newly Acquired or Constructed Property	180 days
Buildings	\$500,000
Business Personal Property	\$250,000
Personal Effects and Property of Others	\$ 10,000
Valuable Papers and Records (Other Than Electronic Data)	\$ 10,000
Property Off-Premises (Including while in Transit)	\$ 10,000
Outdoor Property	\$ 10,000
Accounts Receivable	\$ 10,000
Arson Reward	\$ 10,000
Back-up of Sewers or Drains	\$ 10,000
Extra Expense	\$ 10,000
Fine Arts	\$ 10,000
Fire Protective Devices	\$ 10,000
Loss of Refrigeration	\$ 10,000
Computer Equipment	\$ 10,000
Laptop/Portable Computers	\$ 5,000
Lock Replacement	\$ 500
Money and Securities	
Inside the Premises	\$ 2,500
Outside the Premises	\$ 2,500
Off-Premises Services Interruption	\$ 10,000
Signs (Attached)	\$ 10,000
Special Deductible Provisions	Included

A. The following changes apply to Section A. **COVERAGE** of the BUILDING AND PERSONAL PROPERTY COVERAGE FORM.

1. Broadened Premises

The **within 100 feet of the described premises** limitation stated in Paragraph A.1.a.(5)(b), **Building**, Paragraph A.1.b., **Your Business Personal Property**, Paragraph A.1.c.(2), **Personal Property of Others** and Paragraph A.5., **Coverage Extensions** is deleted and replaced by **within 1000 feet of the described premises**.

Includes copyrighted material of Insurance Services Office, Inc., with its permission
© ISO Properties, Inc., 2001

2. Real Property of Others Required by Contract

The following is added to item **b. Your Business Personal Property** of Paragraph 1. **Covered Property**:

- (8) Real Property coverage including but not limited to building, doors and windows you are responsible for due to contract or lease agreement.

The most we will pay for loss or damage to covered property is \$5,000.

3. Electronic Data

Item **f.(4) Electronic Data** of paragraph 4. **Additional Coverages** is deleted and replaced by the following:

- (4) The most we will pay under this Additional Coverage – Electronic Data is \$5000 for all loss or damage sustained in any one policy year, regardless of the number of occurrences of loss or damage or the number of premises, locations or computer systems involved. If loss payment on the first occurrence does not exhaust this amount, then the balance is available for subsequent loss or damage sustained in but not after that policy year. With respect to an occurrence which begins in one policy year and continues or results in additional loss or damage in a subsequent policy year(s), all loss or damage is deemed to be sustained in the policy year in which the occurrence began.

4. Newly Acquired or Constructed Property

Item **a. Newly Acquired or Constructed Property** of Paragraph 5. **Coverage Extensions** is deleted and replaced by the following:

(1) Buildings

If this policy covers Building, you may extend that insurance to apply to:

- (a) Your new buildings while being built on the described premises; and
- (b) Buildings you acquire at locations, other than the described premises, intended for:
- (i) Similar use as the building described in the Declarations; or
 - (ii) Use as a warehouse.

The most we will pay for loss or damage under this Extension is \$500,000 at each building.

(2) Your Business Personal Property

- (a) If this policy covers Your Business Personal Property, you may extend that insurance to apply to:
- (i) Business personal property, including such property that you newly acquire, at any location you acquire other than at fairs, trade shows or exhibitions;
 - (ii) Business personal property, including such property that you newly acquire, located at your newly constructed or acquired buildings at the location described in the Declarations; or
 - (iii) Business personal property that you newly acquire, located at the described premises.

The most we will pay for loss or damage under this Extension is \$250,000 at each building.

Includes copyrighted material of Insurance Services Office, Inc., with its permission
© ISO Properties, Inc., 2001

(b) This Extension does not apply to:

- (i) Personal property of others that is temporarily in your possession in the course of installing or performing work on such property; or
- (ii) Personal property of others that is temporarily in your possession in the course of your manufacturing or wholesaling activities.

(3) Period Of Coverage

With respect to insurance on or at each newly acquired or constructed property, coverage will end when any of the following occurs:

- (a) This policy expires;
- (b) 180 days expire after you acquire the property or begin construction of that part of the building that would qualify as covered property; or
- (c) You report values to us.

We will charge you additional premium for values reported from the date you acquire the property or begin construction of that part of the building that would qualify as covered property.

5. Personal Effects and Property of Others

Item **b. Personal Effects and Property of Others** of Paragraph **5. Coverage Extensions** is amended as follows:

The most we will pay for loss or damage under this Extension is \$10,000 at each described premises. Our payment for loss of or damage to personal property of others (including property of others held by you on consignment) will only be for the account of the owner of the property.

6. Valuable Papers and Records (Other Than Electronic Data)

Item **c.(4) Valuable Papers and Records (Other Than Electronic Data)** of Paragraph **5. Coverage Extensions** is deleted and replaced by the following:

- (4) Under this Extension, the most we will pay to replace or restore the lost information is \$10,000 at each described premises. Such amount is additional insurance. We will also pay for the cost of blank material for reproducing the records (whether or not duplicates exist), and (when there is a duplicate) for the cost of labor to transcribe or copy the records. The costs of blank material and labor are subject to the applicable Limit of Insurance on Your Business Personal Property and therefore coverage of such costs is not additional insurance.

7. Property Off-Premises

Item **d. Property Off-Premises** of Paragraph **5. Coverage Extensions** is deleted and replaced by the following:

- (1) You may extend the insurance provided by this Coverage Form to apply to your Covered Property while it is away from the described premises if it is:
 - (a) Temporarily at a location you do not own, lease or operate;
 - (b) In storage at a location you lease, provided the lease was executed after the beginning of the current policy term; or

(c) At any fair, trade show or exhibition.

This Extension applies only if loss or damage is caused by a Covered Cause of Loss.

(2) You may extend the insurance provided by this Coverage Form to apply to your personal property in transit more than 1,000 feet from the described premises. Property must be in or on a motor vehicle you own, lease or operate while between points in the coverage territory. Loss or damage must be caused by or result from one of the following causes of loss:

(a) Fire, lightning, explosion, windstorm or hail, riot or civil commotion, or vandalism.

(b) Vehicle collision, upset or overturn. Collision means accidental contact of your vehicle with another vehicle or object. Collision does not mean the vehicle's contact with the roadbed.

(c) Theft of an entire bale, case or package by forced entry into a securely locked body or compartment of the vehicle. There must be visible signs of forced entry.

(3) The most we will pay for loss or damage under this Extension is \$10,000.

8. Outdoor Property

Item e. **Outdoor Property** of Paragraph 5. **Coverage Extensions** is deleted and replaced by the following:

You may extend the insurance provided by this Coverage Form to apply to your outdoor fences, lighting, lighting standards, radio and television antennas, satellite dish, signs (other than signs attached to buildings), playground equipment, scoreboards, trees, shrubs and plants (other than "stock" of trees, shrubs or plants), including debris removal expense, caused by or resulting from any of the Covered Causes of Loss.

The most we will pay for loss or damage under this Extension is \$10,000, but not more than \$250 for any one tree, shrub or plant. These limits apply to any one occurrence, regardless of the types or numbers of items lost or damaged in that occurrence.

9. The following are added to Paragraph 5. **Coverage Extensions**:

g. Accounts Receivable

We will pay:

(1) All amounts due from your customers that you are unable to collect;

(2) Interest charges on any loan required to offset amounts you are unable to collect pending our payment of these amounts;

(3) Collection expenses in excess of your normal collection expenses that are made necessary by the loss or damage; and

(4) Other reasonable expenses that you incur to re-establish your records of accounts receivable;

that result from a Covered Cause of Loss to your records of accounts receivable.

The most we will pay for loss under this Extension is \$10,000.

h. Arson Reward

We will pay on behalf of the insured up to \$10,000 for information which leads to an arson conviction in connection with a fire loss covered under this Coverage Form. Regardless of the number of persons involved in providing information, our liability under this Coverage Extension will not be increased.

i. Back-Up of Sewers or Drains

We cover direct physical loss or damage caused by water:

- (1) which backs up through sewers or drains; or
- (2) which enters into and overflows from within a sump pump, sump pump well or other type of system designed to remove subsurface water which is drained from the foundation area.

This coverage does not apply if the loss or damage is caused by your negligence.

The most we will pay for loss or damage under this Coverage Extension is \$10,000.

j. Extra Expense

We will pay the actual and necessary Extra Expense you sustain due to direct physical loss of or damage to property at premises which are described in the Declarations, including personal property in the open or in a vehicle, within 1,000 feet of the premises. The loss or damage must be caused by or resulting from a Covered Cause of Loss.

If you are a tenant, your premises is the portion of the building which you rent, lease or occupy, including:

- (i) All routes within the building to gain access to the described premises; and
- (ii) Your personal property in the open (or in a vehicle) within 1,000 feet.

The following definitions are added as respects this Coverage Extension:

- (1) Extra Expense means necessary expenses you incur during the period of restoration that you would not have incurred if there had been no direct physical loss or damage:
 - (a) To avoid or minimize the suspension of business and to continue operations:
 - 1. At the described premises; or
 - 2. At replacement premises or at temporary locations, including:
 - A. Relocation expenses; or
 - B. Costs to equip and operate the replacement or temporary locations.
 - (b) To minimize the suspension of business if you cannot continue operations.
 - (c)
 - 1. To repair or replace any property; or
 - 2. To research, replace or restore the lost information on damaged valuable papers and records;

to the extent it reduces the amount of loss that otherwise would have been payable under this Coverage Extension.

(2) Operations mean the type of your business activities occurring at the described premises.

(3) Period of Restoration means the period of time that:

(a) Begins with the date of direct physical loss or damage caused by or resulting from a Covered Cause of Loss at the described premises; and

(b) Ends on the earlier of:

1. The date when the property at the described premises should be repaired, rebuilt or replaced with reasonable speed and similar quality.; or
2. The date when business is resumed at a new permanent location.

Period of Restoration does not include any increased period required due to the enforcement of any ordinance or law that

1. Regulates the construction, use or repair, or requires the tearing down of any property; or
2. Requires any insured or others to test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of "pollutants".

The expiration date of this policy will not cut short the period of restoration.

The most we will pay for loss under this Coverage Extension is \$10,000.

k. Fine Arts

You may extend the insurance that applies to your Business Personal Property to apply to your fine arts and fine arts owned by others that are in your care, custody or control.

This Extension does not apply to loss or damage caused by or resulting from:

- (1) While fine arts are at any fair or on exhibition;
- (2) Any repairing, restoration or retouching process;
- (3) Insects, birds, rodents or other animals;
- (4) Wear and tear;
- (5) Rust, corrosion, fungus, decay, deterioration, hidden or latent defect or any quality in the property that causes it to damage or destroy itself;
- (6) Breakage of art glass windows, statuary, marbles, glassware, bric-a-brac, porcelains and similar fragile articles. But we will pay for loss or damage caused directly by fire, lightning, aircraft, theft or attempted theft, cyclone, tornado, windstorm, explosion, vandalism, or by accident to the vehicle carrying the property.

The most we will pay for loss or damage under this Extension is \$10,000.

l. Fire Protective Devices

You may extend the insurance provided by this Coverage Form to apply to recharging or refilling of your fire protective devices that are permanently installed in buildings at the described premises when such devices have been discharged by accident or after being used in fighting a fire. This Extension does not apply to periodic recharge or refilling.

The most we will pay under this Extension is \$10,000 for each separate 12-month period of this policy.

Includes copyrighted material of Insurance Services Office, Inc., with its permission
© ISO Properties, Inc., 2001

m. Loss of Refrigeration

You may extend the insurance provided by this Coverage Form to apply to direct physical loss of or damage to property owned by you and used in your business or owned by others and in your care, custody or control, contained in any refrigeration or cooling apparatus or equipment resulting from:

- (1) The fluctuation or total interruption of electrical power, either on or off the described premises, due to conditions beyond your control; or
- (2) Mechanical failure of any refrigeration or cooling apparatus or equipment (on premises).

The most we will pay for loss or damage under this Extension is \$10,000.

n. Computer Equipment

You may extend the insurance that applies to your Business Personal Property to apply to loss or damage to "computer equipment" owned by you or similar property of others in your care, custody or control for which you are legally liable, caused by a Covered Cause of Loss.

You may extend the insurance that applies to your Business Personal Property to apply to loss or damage to "laptop/portable computers" owned by you and in your care, custody and control or in the care, custody or control of your employee.

(1) Property Not Covered

We will not cover the following kinds of property under this Extension:

- (a) Property which you rent or lease to others;
- (b) Software or other electronic data ;
- (c) Accounts, bills, evidences of debt, valuable papers, records, abstracts, deeds, manuscripts, program documentation or other documents.
- (d) "Computer equipment" held for sale by you;
- (e) "Computer equipment" of others on which you are performing repairs or work;
- (f) "Computer equipment" that is part of any:
 - (i) Production or processing equipment (such as CAD, CAM or CNC machines);
 - (ii) Equipment used to maintain or service your building (such as heating, ventilating, cooling or alarm systems); or
 - (iii) Communication equipment (such as telephone systems).
- (g) Property that is covered under another coverage form of this or any other policy in which such property is more specifically described, except for the excess of the amount due (whether you can collect on it or not) from that other insurance.

(2) Property In Transit

We will pay for your "computer equipment" or "laptop/portable computer" while in transit.

- (3) Section **B. Exclusions, 1.b. Earth Movement** of the CAUSES OF LOSS – SPECIAL FORM, as respects **A.5.n. Computer Equipment**, is deleted in its entirety.

Includes copyrighted material of Insurance Services Office, Inc., with its permission
© ISO Properties, Inc., 2001

- (4) Section **B. Exclusions, 1.e. Utility Services** of the CAUSES OF LOSS – SPECIAL FORM, as respects **A.5.n. Computer Equipment**, is deleted in its entirety.
- (5) Section **B. Exclusions, 1.g. Water** of the CAUSES OF LOSS – SPECIAL FORM, as respects **A.5.n. Computer Equipment**, is deleted in its entirety.
- (6) The artificially generated electrical current exclusion, Item **B.2.a.** of the CAUSES OF LOSS – SPECIAL FORM, as respects **A.5.n. Computer Equipment**, is deleted in its entirety.
- (7) The mechanical breakdown exclusion, Item **B.2.d.(6)** of the CAUSES OF LOSS – SPECIAL FORM, as respects **A.5.n. Computer Equipment**, is deleted and replaced by the following:
 - (6) Mechanical breakdown, failure or derangement, except:
 - (a) This exclusion does not apply for the accidental loss or damage caused by a resulting fire or explosion.
 - (b) This exclusion does not apply if any of the above is sudden and accidental and manifests itself by physical damage to “computer equipment” which requires repair or replacement.
- (8) Loss Payment will be determined as follows:

“Computer equipment” or “laptop/portable computers”

We will pay the least of the following amounts:

- (i) The cost of reasonably restoring that property to its condition immediately before the loss or damage; or
- (ii) The cost of replacing that property with identical property of comparable material and quality and used for the same purpose.

However, when repair or replacement with identical property is not possible, we will pay the cost to replace that property with similar property capable of performing the same functions.

If not repaired or replaced, the property will be valued at its actual cash value.

“Computer Equipment” means a network of electronic machine components capable of accepting information, processing it according to instructions and producing the results in a desired form.

“Laptop/Portable Computers” means “computer equipment” and accessories that are designed to function with it, that can easily be carried and is designed to be used at more than one location.

The most we will pay for loss or damage to “computer equipment” under this Extension is \$10,000.

The most we will pay under this Extension for loss or damage to “laptop/portable computers” while away from the described premises is \$5,000.

o. Lock Replacement

You may extend the insurance provided by this Coverage Form to apply to replacement of locks necessitated by theft of Covered Property or theft of keys from the described premises.

The most we will pay for loss under this Coverage Extension is \$500 in any one occurrence.

p. Money and Securities

- (1)** You may extend the insurance that applies to Business Personal Property to apply to loss of “money” and “securities” used in your business while at a bank or savings institution, within your living quarters or the living quarters of your partners or any employee having use and custody of the property, at the described premises, or in transit between any of these places, resulting directly from:
 - (a)** Theft, meaning any act of stealing;
 - (b)** Disappearance; or
 - (c)** Destruction.
- (2)** In addition to the Limitations and Exclusions applicable to property coverage, we will not pay for loss:
 - (a)** Resulting from accounting or arithmetical errors or omissions;
 - (b)** Due to the giving or surrendering of property in any exchange or purchase; or
 - (c)** Of property contained in any money-operated device unless the amount of “money” deposited in it is recorded by a continuous recording instrument in the device.
- (3)** The most we will pay for loss in any one occurrence is:
 - (a)** \$2,500 for Inside the Premises for “money” and “securities” while:
 - (i)** In or on the described premises; or
 - (ii)** Within a bank or savings institution; and
 - (b)** \$2,500 for Outside the Premises for “money” and “securities” while anywhere else.
- (4)** All loss:
 - (a)** Caused by one or more persons; or
 - (b)** Involving a single act or series of related acts;is considered one occurrence.
- (5)** You must keep records of all “money” and “securities” so we can verify the amount of any loss or damage.
- (6)** “**Money**” means:
 - (a)** Currency, coins and bank notes in current use and having a face value; and
 - (b)** Travelers checks, register checks and money orders held for sale to the public.
- (7)** “**Securities**” means negotiable and non-negotiable instruments or contracts representing either “money” or other property and includes:
 - (a)** Tokens, tickets, revenue and other stamps (whether represented by actual stamps or unused value in a meter) in current use; and

Includes copyrighted material of Insurance Services Office, Inc., with its permission
© ISO Properties, Inc., 2001

(b) Evidences of debt issued in connection with credit or charge cards, which cards are not issued by you;

but does not include "money".

q. Off-Premises Services Interruption

You may extend the insurance provided by this Coverage Form to apply to loss of or damage to Covered Property caused by interruption of service to the described premises. The interruption must result from direct physical loss or damage by a Covered Cause of Loss to the following property not on the described premises:

(1) **Water Supply Services**, meaning the following types of property supplying water to the described premises:

(a) Pumping stations; and

(b) Water mains.

(2) **Communication Supply Services**, meaning property supplying communication services, including telephone, radio, microwave or television services to the described premises, such as:

(a) Communication transmission lines, including optic fiber transmission lines;

(b) Coaxial cables; and

(c) Microwave radio relays except satellites.

It does not include above ground communication lines.

(3) **Power Supply Services**, meaning the following types of property supplying electricity, steam or gas to the described premises:

(a) Utility generating plants;

(b) Switching stations;

(c) Substations;

(d) Transformers; and

(e) Transmission lines.

It does not include above ground transmission or distribution lines.

The most we will pay under this Extension is \$10,000.

B. The following change applies to Section C. LIMITS OF INSURANCE:

Signs (Attached)

Section **C. LIMITS OF INSURANCE** is amended as follows:

The most we will pay for loss or damage to outdoor signs attached to buildings is \$10,000 per sign in any one occurrence.

C. The following is added to Section D. **DEDUCTIBLE**:

Special Deductible Provision

We will deduct from any loss or damage under the Coverage Extensions in any one occurrence the Deductible shown in the Declarations or \$500, whichever is less.

This deductible applies to all Coverage Extensions, except for:

- a. Newly Acquired or Constructed Property; and
- e. Outdoor Property

All other terms and conditions of this policy remain unchanged.

BUILDING AND PERSONAL PROPERTY COVERAGE FORM

Various provisions in this policy restrict coverage. Read the entire policy carefully to determine rights, duties and what is and is not covered.

Throughout this policy the words "you" and "your" refer to the Named Insured shown in the Declarations. The words "we", "us" and "our" refer to the Company providing this insurance.

Other words and phrases that appear in quotation marks have special meaning. Refer to Section **H. – Definitions.**

A. Coverage

We will pay for direct physical loss of or damage to Covered Property at the premises described in the Declarations caused by or resulting from any Covered Cause of Loss.

1. Covered Property

Covered Property, as used in this Coverage Part, means the type of property described in this Section, **A.1.**, and limited in **A.2.**, Property Not Covered, if a Limit of Insurance is shown in the Declarations for that type of property.

a. Building, meaning the building or structure described in the Declarations, including:

- (1) Completed additions;
- (2) Fixtures, including outdoor fixtures;
- (3) Permanently installed:
 - (a) Machinery and
 - (b) Equipment;
- (4) Personal property owned by you that is used to maintain or service the building or structure or its premises, including:
 - (a) Fire extinguishing equipment;
 - (b) Outdoor furniture;
 - (c) Floor coverings; and
 - (d) Appliances used for refrigerating, ventilating, cooking, dishwashing or laundering;
- (5) If not covered by other insurance:
 - (a) Additions under construction, alterations and repairs to the building or structure;
 - (b) Materials, equipment, supplies and temporary structures, on or within 100 feet of the described premises, used for making additions, alterations or repairs to the building or structure.

b. Your Business Personal Property located in or on the building described in the Declarations or in the open (or in a vehicle) within 100 feet of the described premises, consisting of the following unless otherwise specified in the Declarations or on the Your Business Personal Property – Separation of Coverage form:

- (1) Furniture and fixtures;
- (2) Machinery and equipment;
- (3) "Stock";
- (4) All other personal property owned by you and used in your business;
- (5) Labor, materials or services furnished or arranged by you on personal property of others;
- (6) Your use interest as tenant in improvements and betterments. Improvements and betterments are fixtures, alterations, installations or additions:
 - (a) Made a part of the building or structure you occupy but do not own; and
 - (b) You acquired or made at your expense but cannot legally remove;

(7) Leased personal property for which you have a contractual responsibility to insure, unless otherwise provided for under Personal Property of Others.

c. Personal Property Of Others that is:

(1) In your care, custody or control; and

(2) Located in or on the building described in the Declarations or in the open (or in a vehicle) within 100 feet of the described premises.

However, our payment for loss of or damage to personal property of others will only be for the account of the owner of the property.

2. Property Not Covered

Covered Property does not include:

- a. Accounts, bills, currency, food stamps or other evidences of debt, money, notes or securities. Lottery tickets held for sale are not securities;
- b. Animals, unless owned by others and boarded by you, or if owned by you, only as "stock" while inside of buildings;
- c. Automobiles held for sale;
- d. Bridges, roadways, walks, patios or other paved surfaces;
- e. Contraband, or property in the course of illegal transportation or trade;
- f. The cost of excavations, grading, backfilling or filling;
- g. Foundations of buildings, structures, machinery or boilers if their foundations are below:
 - (1) The lowest basement floor; or
 - (2) The surface of the ground, if there is no basement;
- h. Land (including land on which the property is located), water, growing crops or lawns;
 - i. Personal property while airborne or waterborne;
 - j. Bulkheads, pilings, piers, wharves or docks;
- k. Property that is covered under another coverage form of this or any other policy in which it is more specifically described, except for the excess of the amount due (whether you can collect on it or not) from that other insurance;
- l. Retaining walls that are not part of a building;
- m. Underground pipes, flues or drains;
- n. Electronic data, except as provided under Additional Coverages – Electronic Data. Electronic data means information, facts or computer programs stored as or on, created or used on, or transmitted to or from computer software (including systems and applications software), on hard or floppy disks, CD-ROMs, tapes, drives, cells, data processing devices or any other repositories of computer software which are used with electronically controlled equipment. The term computer programs, referred to in the foregoing description of electronic data, means a set of related electronic instructions which direct the operations and functions of a computer or device connected to it, which enable the computer or device to receive, process, store, retrieve or send data. This Paragraph n., does not apply to your "stock" of prepackaged software.
- o. The cost to replace or restore the information on valuable papers and records, including those which exist as electronic data. Valuable papers and records include but are not limited to proprietary information, books of account, deeds, manuscripts, abstracts, drawings and card index systems. Refer to the Coverage Extension for Valuable Papers And Records (Other Than Electronic Data) for limited coverage for valuable papers and records other than those which exist as electronic data.
- p. Vehicles or self-propelled machines (including aircraft or watercraft) that:
 - (1) Are licensed for use on public roads; or

(2) Are operated principally away from the described premises.

This paragraph does not apply to:

- (a) Vehicles or self-propelled machines or autos you manufacture, process or warehouse;
- (b) Vehicles or self-propelled machines, other than autos, you hold for sale;
- (c) Rowboats or canoes out of water at the described premises; or
- (d) Trailers, but only to the extent provided for in the Coverage Extension for Non-Owned Detached Trailers.

q. The following property while outside of buildings:

- (1) Grain, hay, straw or other crops;
- (2) Fences, radio or television antennas (including satellite dishes) and their lead-in wiring, masts or towers, signs (other than signs attached to buildings), trees, shrubs or plants (other than "stock" of trees, shrubs or plants), all except as provided in the Coverage Extensions.

3. Covered Causes Of Loss

See applicable Causes of Loss Form as shown in the Declarations.

4. Additional Coverages

a. Debris Removal

(1) Subject to Paragraphs (3) and (4), we will pay your expense to remove debris of Covered Property caused by or resulting from a Covered Cause of Loss that occurs during the policy period. The expenses will be paid only if they are reported to us in writing within 180 days of the date of direct physical loss or damage.

(2) Debris Removal does not apply to costs to:

- (a) Extract "pollutants" from land or water; or
- (b) Remove, restore or replace polluted land or water.

(3) Subject to the exceptions in Paragraph (4), the following provisions apply:

- (a) The most we will pay for the total of direct physical loss or damage plus debris removal expense is the Limit of Insurance applicable to the Covered Property that has sustained loss or damage.
- (b) Subject to (a) above, the amount we will pay for debris removal expense is limited to 25% of the sum of the deductible plus the amount that we pay for direct physical loss or damage to the Covered Property that has sustained loss or damage.

(4) We will pay up to an additional \$10,000 for debris removal expense, for each location, in any one occurrence of physical loss or damage to Covered Property, if one or both of the following circumstances apply:

- (a) The total of the actual debris removal expense plus the amount we pay for direct physical loss or damage exceeds the Limit of Insurance on the Covered Property that has sustained loss or damage.
- (b) The actual debris removal expense exceeds 25% of the sum of the deductible plus the amount that we pay for direct physical loss or damage to the Covered Property that has sustained loss or damage.

Therefore, if (4)(a) and/or (4)(b) apply, our total payment for direct physical loss or damage and debris removal expense may reach but will never exceed the Limit of Insurance on the Covered Property that has sustained loss or damage, plus \$10,000.

(5) Examples

The following examples assume that there is no coinsurance penalty.

Example #1

Limit of Insurance	\$ 90,000
Amount of Deductible	\$ 500
Amount of Loss	\$ 50,000
Amount of Loss Payable	\$ 49,500
	(\$50,000 – \$500)
Debris Removal Expense	\$ 10,000
Debris Removal Expense Payable	\$ 10,000
	(\$10,000 is 20% of \$50,000)

The debris removal expense is less than 25% of the sum of the loss payable plus the deductible. The sum of the loss payable and the debris removal expense (\$49,500 + \$10,000 = \$59,500) is less than the Limit of Insurance. Therefore the full amount of debris removal expense is payable in accordance with the terms of Paragraph **(3)**.

Example #2

Limit of Insurance	\$ 90,000
Amount of Deductible	\$ 500
Amount of Loss	\$ 80,000
Amount of Loss Payable	\$ 79,500
	(\$80,000 – \$500)
Debris Removal Expense	\$ 30,000
Debris Removal Expense Payable	
	Basic Amount \$ 10,500
	Additional Amount \$ 10,000

The basic amount payable for debris removal expense under the terms of Paragraph **(3)** is calculated as follows: \$80,000 (\$79,500 + \$500) x .25 = \$20,000; capped at \$10,500. The cap applies because the sum of the loss payable (\$79,500) and the basic amount payable for debris removal expense (\$10,500) cannot exceed the Limit of Insurance (\$90,000).

The additional amount payable for debris removal expense is provided in accordance with the terms of Paragraph **(4)**, because the debris removal expense (\$30,000) exceeds 25% of the loss payable plus the deductible (\$30,000 is 37.5% of \$80,000), and because the sum of the loss payable and debris removal expense (\$79,500 + \$30,000 = \$109,500) would exceed the Limit of Insurance (\$90,000). The additional amount of covered debris removal expense is \$10,000, the maximum payable under Paragraph **(4)**. Thus the total payable for debris removal expense in this example is \$20,500; \$9,500 of the debris removal expense is not covered.

b. Preservation Of Property

If it is necessary to move Covered Property from the described premises to preserve it from loss or damage by a Covered Cause of Loss, we will pay for any direct physical loss or damage to that property:

- (1)** While it is being moved or while temporarily stored at another location; and
- (2)** Only if the loss or damage occurs within 30 days after the property is first moved.

c. Fire Department Service Charge

When the fire department is called to save or protect Covered Property from a Covered Cause of Loss, we will pay up to \$1,000 for your liability for fire department service charges:

- (1) Assumed by contract or agreement prior to loss; or
- (2) Required by local ordinance.

No Deductible applies to this Additional Coverage.

d. Pollutant Clean Up And Removal

We will pay your expense to extract "pollutants" from land or water at the described premises if the discharge, dispersal, seepage, migration, release or escape of the "pollutants" is caused by or results from a Covered Cause of Loss that occurs during the policy period. The expenses will be paid only if they are reported to us in writing within 180 days of the date on which the Covered Cause of Loss occurs.

This Additional Coverage does not apply to costs to test for, monitor or assess the existence, concentration or effects of "pollutants". But we will pay for testing which is performed in the course of extracting the "pollutants" from the land or water.

The most we will pay under this Additional Coverage for each described premises is \$10,000 for the sum of all covered expenses arising out of Covered Causes of Loss occurring during each separate 12 month period of this policy.

e. Increased Cost Of Construction

- (1) This Additional Coverage applies only to buildings to which the Replacement Cost Optional Coverage applies.
- (2) In the event of damage by a Covered Cause of Loss to a building that is Covered Property, we will pay the increased costs incurred to comply with enforcement of an ordinance or law in the course of repair, rebuilding or replacement of damaged parts of that property, subject to the limitations stated in **e.(3)** through **e.(9)** of this Additional Coverage.
- (3) The ordinance or law referred to in **e.(2)** of this Additional Coverage is an ordinance or law that regulates the construction or repair of buildings or establishes zoning or land use requirements at the described premises, and is in force at the time of loss.
- (4) Under this Additional Coverage, we will not pay any costs due to an ordinance or law that:
 - (a) You were required to comply with before the loss, even when the building was undamaged; and
 - (b) You failed to comply with.
- (5) Under this Additional Coverage, we will not pay for:
 - (a) The enforcement of any ordinance or law which requires demolition, repair, replacement, reconstruction, remodeling or remediation of property due to contamination by "pollutants" or due to the presence, growth, proliferation, spread or any activity of "fungus", wet or dry rot or bacteria; or
 - (b) Any costs associated with the enforcement of an ordinance or law which requires any insured or others to test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of "pollutants", "fungus", wet or dry rot or bacteria.
- (6) The most we will pay under this Additional Coverage, for each described building insured under this Coverage Form, is \$10,000 or 5% of the Limit of Insurance applicable to that building, whichever is less. If a damaged building is covered under a blanket Limit of Insurance which applies to more than one building or item of property, then the most we will pay under this Additional Coverage, for that damaged building, is the lesser of: \$10,000 or 5% times the value of the damaged building as of the time of loss times the applicable coinsurance percentage.

The amount payable under this Additional Coverage is additional insurance.
- (7) With respect to this Additional Coverage:
 - (a) We will not pay for the Increased Cost of Construction:
 - (i) Until the property is actually repaired or replaced, at the same or another premises; and
 - (ii) Unless the repairs or replacement are made as soon as reasonably possible after the loss or damage, not to exceed two years. We may extend this period in writing during the two years.

- (b) If the building is repaired or replaced at the same premises, or if you elect to rebuild at another premises, the most we will pay for the Increased Cost of Construction, subject to the provisions of e.(6) of this Additional Coverage, is the increased cost of construction at the same premises.
- (c) If the ordinance or law requires relocation to another premises, the most we will pay for the Increased Cost of Construction, subject to the provisions of e.(6) of this Additional Coverage, is the increased cost of construction at the new premises.
- (8) This Additional Coverage is not subject to the terms of the Ordinance or Law Exclusion, to the extent that such Exclusion would conflict with the provisions of this Additional Coverage.
- (9) The costs addressed in the Loss Payment and Valuation Conditions, and the Replacement Cost Optional Coverage, in this Coverage Form, do not include the increased cost attributable to enforcement of an ordinance or law. The amount payable under this Additional Coverage, as stated in e.(6) of this Additional Coverage, is not subject to such limitation.

f. Electronic Data

- (1) Under this Additional Coverage, electronic data has the meaning described under Property Not Covered – Electronic Data.
- (2) Subject to the provisions of this Additional Coverage, we will pay for the cost to replace or restore electronic data which has been destroyed or corrupted by a Covered Cause of Loss. To the extent that electronic data is not replaced or restored, the loss will be valued at the cost of replacement of the media on which the electronic data was stored, with blank media of substantially identical type.
- (3) The Covered Causes of Loss applicable to Your Business Personal Property apply to this Additional Coverage – Electronic Data, subject to the following:
 - (a) If the Causes Of Loss – Special Form applies, coverage under this Additional Coverage – Electronic Data is limited to the "specified causes of loss" as defined in that form, and Collapse as set forth in that form.
 - (b) If the Causes Of Loss – Broad Form applies, coverage under this Additional Coverage – Electronic Data includes Collapse as set forth in that form.
 - (c) If the Causes Of Loss Form is endorsed to add a Covered Cause of Loss, the additional Covered Cause of Loss does not apply to the coverage provided under this Additional Coverage – Electronic Data.
 - (d) The Covered Causes of Loss include a virus, harmful code or similar instruction introduced into or enacted on a computer system (including electronic data) or a network to which it is connected, designed to damage or destroy any part of the system or disrupt its normal operation. But there is no coverage for loss or damage caused by or resulting from manipulation of a computer system (including electronic data) by any employee, including a temporary or leased employee, or by an entity retained by you or for you to inspect, design, install, modify, maintain, repair or replace that system.
- (4) The most we will pay under this Additional Coverage – Electronic Data is \$2,500 for all loss or damage sustained in any one policy year, regardless of the number of occurrences of loss or damage or the number of premises, locations or computer systems involved. If loss payment on the first occurrence does not exhaust this amount, then the balance is available for subsequent loss or damage sustained in but not after that policy year. With respect to an occurrence which begins in one policy year and continues or results in additional loss or damage in a subsequent policy year(s), all loss or damage is deemed to be sustained in the policy year in which the occurrence began.

5. Coverage Extensions

Except as otherwise provided, the following Extensions apply to property located in or on the building described in the Declarations or in the open (or in a vehicle) within 100 feet of the described premises.

If a Coinsurance percentage of 80% or more or, a Value Reporting period symbol, is shown in the Declarations, you may extend the insurance provided by this Coverage Part as follows:

a. Newly Acquired Or Constructed Property

(1) Buildings

If this policy covers Building, you may extend that insurance to apply to:

- (a)** Your new buildings while being built on the described premises; and
- (b)** Buildings you acquire at locations, other than the described premises, intended for:
 - (i)** Similar use as the building described in the Declarations; or
 - (ii)** Use as a warehouse.

The most we will pay for loss or damage under this Extension is \$250,000 at each building.

(2) Your Business Personal Property

- (a)** If this policy covers Your Business Personal Property, you may extend that insurance to apply to:
 - (i)** Business personal property, including such property that you newly acquire, at any location you acquire other than at fairs, trade shows or exhibitions;
 - (ii)** Business personal property, including such property that you newly acquire, located at your newly constructed or acquired buildings at the location described in the Declarations; or
 - (iii)** Business personal property that you newly acquire, located at the described premises.

The most we will pay for loss or damage under this Extension is \$100,000 at each building.

- (b)** This Extension does not apply to:

- (i)** Personal property of others that is temporarily in your possession in the course of installing or performing work on such property; or
- (ii)** Personal property of others that is temporarily in your possession in the course of your manufacturing or wholesaling activities.

(3) Period Of Coverage

With respect to insurance on or at each newly acquired or constructed property, coverage will end when any of the following first occurs:

- (a)** This policy expires;
- (b)** 30 days expire after you acquire the property or begin construction of that part of the building that would qualify as covered property; or
- (c)** You report values to us.

We will charge you additional premium for values reported from the date you acquire the property or begin construction of that part of the building that would qualify as covered property.

b. Personal Effects And Property Of Others

You may extend the insurance that applies to Your Business Personal Property to apply to:

- (1)** Personal effects owned by you, your officers, your partners or members, your managers or your employees. This extension does not apply to loss or damage by theft.
- (2)** Personal property of others in your care, custody or control.

The most we will pay for loss or damage under this Extension is \$2,500 at each described premises. Our payment for loss of or damage to personal property of others will only be for the account of the owner of the property.

c. Valuable Papers And Records (Other Than Electronic Data)

- (1)** You may extend the insurance that applies to Your Business Personal Property to apply to the cost to replace or restore the lost information on valuable papers and records for which duplicates do not exist. But this Extension does not apply to valuable papers and records which exist as electronic data. Electronic data has the meaning described under Property Not Covered – Electronic Data.

- (2) If the Causes Of Loss – Special Form applies, coverage under this Extension is limited to the "specified causes of loss" as defined in that form, and Collapse as set forth in that form.
- (3) If the Causes Of Loss – Broad Form applies, coverage under this Extension includes Collapse as set forth in that form.
- (4) Under this Extension, the most we will pay to replace or restore the lost information is \$2,500 at each described premises, unless a higher limit is shown in the Declarations. Such amount is additional insurance. We will also pay for the cost of blank material for reproducing the records (whether or not duplicates exist), and (when there is a duplicate) for the cost of labor to transcribe or copy the records. The costs of blank material and labor are subject to the applicable Limit of Insurance on Your Business Personal Property and therefore coverage of such costs is not additional insurance.

d. Property Off-Premises

- (1) You may extend the insurance provided by this Coverage Form to apply to your Covered Property while it is away from the described premises, if it is:
 - (a) Temporarily at a location you do not own, lease or operate;
 - (b) In storage at a location you lease, provided the lease was executed after the beginning of the current policy term; or
 - (c) At any fair, trade show or exhibition.
- (2) This Extension does not apply to property:
 - (a) In or on a vehicle; or
 - (b) In the care, custody or control of your salespersons, unless the property is in such care, custody or control at a fair, trade show or exhibition.
- (3) The most we will pay for loss or damage under this Extension is \$10,000.

e. Outdoor Property

You may extend the insurance provided by this Coverage Form to apply to your outdoor fences, radio and television antennas (including satellite dishes), signs (other than signs attached to buildings), trees, shrubs and plants (other than "stock" of trees, shrubs or plants), including debris removal expense, caused by or resulting from any of the following causes of loss if they are Covered Causes of Loss:

- (1) Fire;
- (2) Lightning;
- (3) Explosion;
- (4) Riot or Civil Commotion; or
- (5) Aircraft.

The most we will pay for loss or damage under this Extension is \$1,000, but not more than \$250 for any one tree, shrub or plant. These limits apply to any one occurrence, regardless of the types or number of items lost or damaged in that occurrence.

f. Non-Owned Detached Trailers

- (1) You may extend the insurance that applies to Your Business Personal Property to apply to loss or damage to trailers that you do not own, provided that:
 - (a) The trailer is used in your business;
 - (b) The trailer is in your care, custody or control at the premises described in the Declarations; and
 - (c) You have a contractual responsibility to pay for loss or damage to the trailer.
- (2) We will not pay for any loss or damage that occurs:
 - (a) While the trailer is attached to any motor vehicle or motorized conveyance, whether or not the motor vehicle or motorized conveyance is in motion;
 - (b) During hitching or unhitching operations, or when a trailer becomes accidentally unhitched from a motor vehicle or motorized conveyance.

(3) The most we will pay for loss or damage under this Extension is \$5,000, unless a higher limit is shown in the Declarations.

(4) This insurance is excess over the amount due (whether you can collect on it or not) from any other insurance covering such property.

Each of these Extensions is additional insurance unless otherwise indicated. The Additional Condition, Coinsurance, does not apply to these Extensions.

B. Exclusions And Limitations

See applicable Causes of Loss Form as shown in the Declarations.

C. Limits Of Insurance

The most we will pay for loss or damage in any one occurrence is the applicable Limit of Insurance shown in the Declarations.

The most we will pay for loss or damage to outdoor signs attached to buildings is \$1,000 per sign in any one occurrence.

The limits applicable to the Fire Department Service Charge and Pollutant Clean Up and Removal Additional Coverages are in addition to the Limits of Insurance.

Payments under the Preservation of Property Additional Coverage will not increase the applicable Limit of Insurance.

D. Deductible

In any one occurrence of loss or damage (hereinafter referred to as loss), we will first reduce the amount of loss if required by the Coinsurance Condition or the Agreed Value Optional Coverage. If the adjusted amount of loss is less than or equal to the Deductible, we will not pay for that loss. If the adjusted amount of loss exceeds the Deductible, we will then subtract the Deductible from the adjusted amount of loss, and will pay the resulting amount or the Limit of Insurance, whichever is less.

When the occurrence involves loss to more than one item of Covered Property and separate Limits of Insurance apply, the losses will not be combined in determining application of the Deductible. But the Deductible will be applied only once per occurrence.

Example No. 1:

(This example assumes there is no coinsurance penalty.)

Deductible:	\$ 250
Limit of Insurance – Bldg. 1:	\$ 60,000
Limit of Insurance – Bldg. 2:	\$ 80,000
Loss to Bldg. 1:	\$ 60,100
Loss to Bldg. 2:	\$ 90,000

The amount of loss to Bldg. 1 (\$60,100) is less than the sum (\$60,250) of the Limit of Insurance applicable to Bldg. 1 plus the Deductible.

The Deductible will be subtracted from the amount of loss in calculating the loss payable for Bldg. 1:

\$ 60,100
<u>– 250</u>
\$ 59,850 Loss Payable – Bldg. 1

The Deductible applies once per occurrence and therefore is not subtracted in determining the amount of loss payable for Bldg. 2. Loss payable for Bldg. 2 is the Limit of Insurance of \$80,000.

Total amount of loss payable: \$59,850 + 80,000 = \$139, 850

Example No. 2:

(This example, too, assumes there is no coinsurance penalty.)

The Deductible and Limits of Insurance are the same as those in Example No. 1.

Loss to Bldg. 1: \$ 70,000
(exceeds Limit of Insurance plus Deductible)

Loss to Bldg. 2: \$ 90,000
(exceeds Limit of Insurance plus Deductible)

Loss Payable – Bldg. 1: \$60,000
(Limit of Insurance)

Loss Payable – Bldg. 2: \$80,000
(Limit of Insurance)

Total amount of loss payable:
\$140,000

E. Loss Conditions

The following conditions apply in addition to the Common Policy Conditions and the Commercial Property Conditions.

1. Abandonment

There can be no abandonment of any property to us.

2. Appraisal

If we and you disagree on the value of the property or the amount of loss, either may make written demand for an appraisal of the loss. In this event, each party will select a competent and impartial appraiser. The two appraisers will select an umpire. If they cannot agree, either may request that selection be made by a judge of a court having jurisdiction. The appraisers will state separately the value of the property and amount of loss. If they fail to agree, they will submit their differences to the umpire. A decision agreed to by any two will be binding. Each party will:

- a. Pay its chosen appraiser; and
- b. Bear the other expenses of the appraisal and umpire equally.

If there is an appraisal, we will still retain our right to deny the claim.

3. Duties In The Event Of Loss Or Damage

- a. You must see that the following are done in the event of loss or damage to Covered Property:
 - (1) Notify the police if a law may have been broken.
 - (2) Give us prompt notice of the loss or damage. Include a description of the property involved.
 - (3) As soon as possible, give us a description of how, when and where the loss or damage occurred.
 - (4) Take all reasonable steps to protect the Covered Property from further damage, and keep a record of your expenses necessary to protect the Covered Property, for consideration in the settlement of the claim. This will not increase the Limit of Insurance. However, we will not pay for any subsequent loss or damage resulting from a cause of loss that is not a Covered Cause of Loss. Also, if feasible, set the damaged property aside and in the best possible order for examination.
 - (5) At our request, give us complete inventories of the damaged and undamaged property. Include quantities, costs, values and amount of loss claimed.
 - (6) As often as may be reasonably required, permit us to inspect the property proving the loss or damage and examine your books and records.

Also permit us to take samples of damaged and undamaged property for inspection, testing and analysis, and permit us to make copies from your books and records.

(7) Send us a signed, sworn proof of loss containing the information we request to investigate the claim. You must do this within 60 days after our request. We will supply you with the necessary forms.

(8) Cooperate with us in the investigation or settlement of the claim.

b. We may examine any insured under oath, while not in the presence of any other insured and at such times as may be reasonably required, about any matter relating to this insurance or the claim, including an insured's books and records. In the event of an examination, an insured's answers must be signed.

4. Loss Payment

a. In the event of loss or damage covered by this Coverage Form, at our option, we will either:

(1) Pay the value of lost or damaged property;

(2) Pay the cost of repairing or replacing the lost or damaged property, subject to **b.** below;

(3) Take all or any part of the property at an agreed or appraised value; or

(4) Repair, rebuild or replace the property with other property of like kind and quality, subject to **b.** below.

We will determine the value of lost or damaged property, or the cost of its repair or replacement, in accordance with the applicable terms of the Valuation Condition in this Coverage Form or any applicable provision which amends or supersedes the Valuation Condition.

b. The cost to repair, rebuild or replace does not include the increased cost attributable to enforcement of any ordinance or law regulating the construction, use or repair of any property.

c. We will give notice of our intentions within 30 days after we receive the sworn proof of loss.

d. We will not pay you more than your financial interest in the Covered Property.

e. We may adjust losses with the owners of lost or damaged property if other than you. If we pay the owners, such payments will satisfy your claims against us for the owners' property. We will not pay the owners more than their financial interest in the Covered Property.

f. We may elect to defend you against suits arising from claims of owners of property. We will do this at our expense.

g. We will pay for covered loss or damage within 30 days after we receive the sworn proof of loss, if you have complied with all of the terms of this Coverage Part and:

(1) We have reached agreement with you on the amount of loss; or

(2) An appraisal award has been made.

5. Recovered Property

If either you or we recover any property after loss settlement, that party must give the other prompt notice. At your option, the property will be returned to you. You must then return to us the amount we paid to you for the property. We will pay recovery expenses and the expenses to repair the recovered property, subject to the Limit of Insurance.

6. Vacancy

a. Description Of Terms

(1) As used in this Vacancy Condition, the term building and the term vacant have the meanings set forth in (1)(a) and (1)(b) below:

(a) When this policy is issued to a tenant, and with respect to that tenant's interest in Covered Property, building means the unit or suite rented or leased to the tenant. Such building is vacant when it does not contain enough business personal property to conduct customary operations.

(b) When this policy is issued to the owner or general lessee of a building, building means the entire building. Such building is vacant unless at least 31% of its total square footage is:

(i) Rented to a lessee or sub-lessee and used by the lessee or sub-lessee to conduct its customary operations; and/or

(ii) Used by the building owner to conduct customary operations.

(2) Buildings under construction or renovation are not considered vacant.

b. Vacancy Provisions

If the building where loss or damage occurs has been vacant for more than 60 consecutive days before that loss or damage occurs:

(1) We will not pay for any loss or damage caused by any of the following even if they are Covered Causes of Loss:

- (a) Vandalism;
- (b) Sprinkler leakage, unless you have protected the system against freezing;
- (c) Building glass breakage;
- (d) Water damage;
- (e) Theft; or
- (f) Attempted theft.

(2) With respect to Covered Causes of Loss other than those listed in **b.(1)(a)** through **b.(1)(f)** above, we will reduce the amount we would otherwise pay for the loss or damage by 15%.

7. Valuation

We will determine the value of Covered Property in the event of loss or damage as follows:

- a. At actual cash value as of the time of loss or damage, except as provided in **b.**, **c.**, **d.** and **e.** below.
- b. If the Limit of Insurance for Building satisfies the Additional Condition, Coinsurance, and the cost to repair or replace the damaged building property is \$2,500 or less, we will pay the cost of building repairs or replacement.

The cost of building repairs or replacement does not include the increased cost attributable to enforcement of any ordinance or law regulating the construction, use or repair of any property. However, the following property will be valued at the actual cash value even when attached to the building:

- (1) Awnings or floor coverings;
 - (2) Appliances for refrigerating, ventilating, cooking, dishwashing or laundering; or
 - (3) Outdoor equipment or furniture.
- c. "Stock" you have sold but not delivered at the selling price less discounts and expenses you otherwise would have had.
 - d. Glass at the cost of replacement with safety glazing material if required by law.
 - e. Tenant's Improvements and Betterments at:
 - (1) Actual cash value of the lost or damaged property if you make repairs promptly.
 - (2) A proportion of your original cost if you do not make repairs promptly. We will determine the proportionate value as follows:
 - (a) Multiply the original cost by the number of days from the loss or damage to the expiration of the lease; and
 - (b) Divide the amount determined in (a) above by the number of days from the installation of improvements to the expiration of the lease.
- If your lease contains a renewal option, the expiration of the renewal option period will replace the expiration of the lease in this procedure.
- (3) Nothing if others pay for repairs or replacement.

F. Additional Conditions

The following conditions apply in addition to the Common Policy Conditions and the Commercial Property Conditions.

1. Coinsurance

If a Coinsurance percentage is shown in the Declarations, the following condition applies.

- a. We will not pay the full amount of any loss if the value of Covered Property at the time of loss times the Coinsurance percentage shown for it in the Declarations is greater than the Limit of Insurance for the property.

Instead, we will determine the most we will pay using the following steps:

- (1) Multiply the value of Covered Property at the time of loss by the Coinsurance percentage;
- (2) Divide the Limit of Insurance of the property by the figure determined in Step (1);
- (3) Multiply the total amount of loss, before the application of any deductible, by the figure determined in Step (2); and
- (4) Subtract the deductible from the figure determined in Step (3).

We will pay the amount determined in Step (4) or the limit of insurance, whichever is less. For the remainder, you will either have to rely on other insurance or absorb the loss yourself.

Example No. 1 (Underinsurance):

When:	The value of the property is	\$ 250,000
	The Coinsurance percentage for it is	80%
	The Limit of Insurance for it is	\$ 100,000
	The Deductible is	\$ 250
	The amount of loss is	\$ 40,000

Step (1): $\$250,000 \times 80\% = \$200,000$

(the minimum amount of insurance to meet your Coinsurance requirements)

Step (2): $\$100,000 / \$200,000 = .50$

Step (3): $\$40,000 \times .50 = \$20,000$

Step (4): $\$20,000 - \$250 = \$19,750$

We will pay no more than \$19,750. The remaining \$20,250 is not covered.

Example No. 2 (Adequate Insurance):

When:	The value of the property is	\$ 250,000
	The Coinsurance percentage for it is	80%
	The Limit of Insurance for it is	\$ 200,000
	The Deductible is	\$ 250
	The amount of loss is	\$ 40,000

The minimum amount of insurance to meet your Coinsurance requirement is \$200,000 ($\$250,000 \times 80\%$). Therefore, the Limit of Insurance in this Example is adequate and no penalty applies. We will pay no more than \$39,750 ($\$40,000$ amount of loss minus the deductible of \$250).

- b. If one Limit of Insurance applies to two or more separate items, this condition will apply to the total of all property to which the limit applies.

Example No. 3:

When:	The value of property is:	
	Bldg. at Location No. 1	\$ 75,000
	Bldg. at Location No. 2	\$ 100,000
	Personal Property at Location No. 2	\$ 75,000
		<u>\$ 250,000</u>
	The Coinsurance percentage for it is	90%
	The Limit of Insurance for Buildings and Personal Property at Location Nos. 1 and 2 is	\$ 180,000
	The Deductible is	\$ 1,000
	The amount of loss is:	
	Bldg. at Location No. 2	\$ 30,000
	Personal Property at Location No. 2.	\$ 20,000
		<u>\$ 50,000</u>

Step (1): $\$250,000 \times 90\% = \$225,000$
(the minimum amount of insurance to meet your Coinsurance requirements and to avoid the penalty shown below)

Step (2): $\$180,000 / \$225,000 = .80$

Step (3): $\$50,000 \times .80 = \$40,000$

Step (4): $\$40,000 - \$1,000 = \$39,000$

We will pay no more than \$39,000. The remaining \$11,000 is not covered.

2. Mortgageholders

- a. The term mortgageholder includes trustee.
- b. We will pay for covered loss of or damage to buildings or structures to each mortgageholder shown in the Declarations in their order of precedence, as interests may appear.
- c. The mortgageholder has the right to receive loss payment even if the mortgageholder has started foreclosure or similar action on the building or structure.
- d. If we deny your claim because of your acts or because you have failed to comply with the terms of this Coverage Part, the mortgageholder will still have the right to receive loss payment if the mortgageholder:
 - (1) Pays any premium due under this Coverage Part at our request if you have failed to do so;
 - (2) Submits a signed, sworn proof of loss within 60 days after receiving notice from us of your failure to do so; and
 - (3) Has notified us of any change in ownership, occupancy or substantial change in risk known to the mortgageholder.

All of the terms of this Coverage Part will then apply directly to the mortgageholder.

- e. If we pay the mortgageholder for any loss or damage and deny payment to you because of your acts or because you have failed to comply with the terms of this Coverage Part:
 - (1) The mortgageholder's rights under the mortgage will be transferred to us to the extent of the amount we pay; and
 - (2) The mortgageholder's right to recover the full amount of the mortgageholder's claim will not be impaired.

At our option, we may pay to the mortgageholder the whole principal on the mortgage plus any accrued interest. In this event, your mortgage and note will be transferred to us and you will pay your remaining mortgage debt to us.

- f. If we cancel this policy, we will give written notice to the mortgageholder at least:
 - (1) 10 days before the effective date of cancellation if we cancel for your nonpayment of premium; or
 - (2) 30 days before the effective date of cancellation if we cancel for any other reason.
- g. If we elect not to renew this policy, we will give written notice to the mortgageholder at least 10 days before the expiration date of this policy.

G. Optional Coverages

If shown as applicable in the Declarations, the following Optional Coverages apply separately to each item.

1. Agreed Value

- a. The Additional Condition, Coinsurance, does not apply to Covered Property to which this Optional Coverage applies. We will pay no more for loss of or damage to that property than the proportion that the Limit of Insurance under this Coverage Part for the property bears to the Agreed Value shown for it in the Declarations.
- b. If the expiration date for this Optional Coverage shown in the Declarations is not extended, the Additional Condition, Coinsurance, is reinstated and this Optional Coverage expires.
- c. The terms of this Optional Coverage apply only to loss or damage that occurs:
 - (1) On or after the effective date of this Optional Coverage; and
 - (2) Before the Agreed Value expiration date shown in the Declarations or the policy expiration date, whichever occurs first.

2. Inflation Guard

- a. The Limit of Insurance for property to which this Optional Coverage applied will automatically increase by the annual percentage shown in the Declarations.
- b. The amount of increase will be:
 - (1) The Limit of Insurance that applied on the most recent of the policy inception date, the policy anniversary date, or any other policy change amending the Limit of Insurance, times
 - (2) The percentage of annual increase shown in the Declarations, expressed as a decimal (example: 8% is .08), times
 - (3) The number of days since the beginning of the current policy year or the effective date of the most recent policy change amending the Limit of Insurance, divided by 365.

Example:

If:	The applicable Limit of Insurance is	\$	100,000
	The annual percentage increase is		8%
	The number of days since the beginning of the policy year (or last policy change) is		146
	The amount of increase is \$100,000 x .08 x 146		
	/ 365 =	\$	3,200

3. Replacement Cost

- a. Replacement Cost (without deduction for depreciation) replaces Actual Cash Value in the Loss Condition, Valuation, of this Coverage Form.
- b. This Optional Coverage does not apply to:
 - (1) Personal property of others;
 - (2) Contents of a residence;
 - (3) Works of art, antiques or rare articles, including etchings, pictures, statuary, marbles, bronzes, porcelains and bric-a-brac; or
 - (4) "Stock", unless the Including "Stock" option is shown in the Declarations.

Under the terms of this Replacement Cost Optional Coverage, tenants' improvements and betterments are not considered to be the personal property of others.
- c. You may make a claim for loss or damage covered by this insurance on an actual cash value basis instead of on a replacement cost basis. In the event you elect to have loss or damage settled on an actual cash value basis, you may still make a claim for the additional coverage this Optional Coverage provides if you notify us of your intent to do so within 180 days after the loss or damage.

- d. We will not pay on a replacement cost basis for any loss or damage:
 - (1) Until the lost or damaged property is actually repaired or replaced; and
 - (2) Unless the repairs or replacement are made as soon as reasonably possible after the loss or damage.
 With respect to tenants' improvements and betterments, the following also apply:
 - (3) If the conditions in **d.(1)** and **d.(2)** above are not met, the value of tenants' improvements and betterments will be determined as a proportion of your original cost, as set forth in the Valuation Condition of this Coverage Form; and
 - (4) We will not pay for loss or damage to tenants' improvements and betterments if others pay for repairs or replacement.
- e. We will not pay more for loss or damage on a replacement cost basis than the least of **(1)**, **(2)** or **(3)**, subject to **f.** below:
 - (1) The Limit of Insurance applicable to the lost or damaged property;
 - (2) The cost to replace the lost or damaged property with other property:
 - (a) Of comparable material and quality; and
 - (b) Used for the same purpose; or
 - (3) The amount actually spent that is necessary to repair or replace the lost or damaged property.
 If a building is rebuilt at a new premises, the cost described in **e.(2)** above is limited to the cost which would have been incurred if the building had been rebuilt at the original premises.
- f. The cost of repair or replacement does not include the increased cost attributable to enforcement of any ordinance or law regulating the construction, use or repair of any property.

4. Extension Of Replacement Cost To Personal Property Of Others

- a. If the Replacement Cost Optional Coverage is shown as applicable in the Declarations, then this Extension may also be shown as applicable. If the Declarations show this Extension as applicable, then Paragraph **3.b.(1)** of the Replacement Cost Optional Coverage is deleted and all other provisions of the Replacement Cost Optional Coverage apply to replacement cost on personal property of others.
- b. With respect to replacement cost on the personal property of others, the following limitation applies:

If an item(s) of personal property of others is subject to a written contract which governs your liability for loss or damage to that item(s), then valuation of that item(s) will be based on the amount for which you are liable under such contract, but not to exceed the lesser of the replacement cost of the property or the applicable Limit of Insurance.

H. Definitions

- 1. "Fungus" means any type or form of fungus, including mold or mildew, and any mycotoxins, spores, scents or by-products produced or released by fungi.
- 2. "Pollutants" means any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals and waste. Waste includes materials to be recycled, reconditioned or reclaimed.
- 3. "Stock" means merchandise held in storage or for sale, raw materials and in-process or finished goods, including supplies used in their packing or shipping.

BUSINESS INCOME (AND EXTRA EXPENSE) COVERAGE FORM

Various provisions in this policy restrict coverage. Read the entire policy carefully to determine rights, duties and what is and is not covered.

Throughout this policy the words "you" and "your" refer to the Named Insured shown in the Declarations. The words "we", "us" and "our" refer to the Company providing this insurance.

Other words and phrases that appear in quotation marks have special meaning. Refer to Section **G. – Definitions**.

A. Coverage

1. Business Income

Business Income means the:

- a. Net Income (Net Profit or Loss before income taxes) that would have been earned or incurred; and
- b. Continuing normal operating expenses incurred, including payroll.

For manufacturing risks, Net Income includes the net sales value of production.

Coverage is provided as described and limited below for one or more of the following options for which a Limit of Insurance is shown in the Declarations:

- a. Business Income including "Rental Value".
- b. Business Income other than "Rental Value".
- c. "Rental Value".

If option **a.** above is selected, the term Business Income will include "Rental Value". If option **c.** above is selected, the term Business Income will mean "Rental Value" only.

If Limits of Insurance are shown under more than one of the above options, the provisions of this Coverage Part apply separately to each.

We will pay for the actual loss of Business Income you sustain due to the necessary "suspension" of your "operations" during the "period of restoration". The "suspension" must be caused by direct physical loss of or damage to property at premises which are described in the Declarations and for which a Business Income Limit of Insurance is shown in the Declarations. The loss or damage must be caused by or result from a Covered Cause of Loss. With respect to loss of or damage to personal property in the open or personal property in a vehicle, the described premises include the area within 100 feet of the site at which the described premises are located.

With respect to the requirements set forth in the preceding paragraph, if you occupy only part of the site at which the described premises are located, your premises means:

- a. The portion of the building which you rent, lease or occupy; and
- b. Any area within the building or on the site at which the described premises are located, if that area services, or is used to gain access to, the described premises.

2. Extra Expense

- a. Extra Expense coverage is provided at the premises described in the Declarations only if the Declarations show that Business Income coverage applies at that premises.
- b. Extra Expense means necessary expenses you incur during the "period of restoration" that you would not have incurred if there had been no direct physical loss or damage to property caused by or resulting from a Covered Cause of Loss.

We will pay Extra Expense (other than the expense to repair or replace property) to:

- (1) Avoid or minimize the "suspension" of business and to continue operations at the described premises or at replacement premises or temporary locations, including relocation expenses and costs to equip and operate the replacement location or temporary location.
- (2) Minimize the "suspension" of business if you cannot continue "operations".

We will also pay Extra Expense to repair or replace property, but only to the extent it reduces the amount of loss that otherwise would have been payable under this Coverage Form.

3. Covered Causes Of Loss, Exclusions And Limitations

See applicable Causes of Loss Form as shown in the Declarations.

4. Additional Limitation – Interruption Of Computer Operations

- a. Coverage for Business Income does not apply when a "suspension" of "operations" is caused by destruction or corruption of electronic data, or any loss or damage to electronic data, except as provided under the Additional Coverage – Interruption Of Computer Operations.
- b. Coverage for Extra Expense does not apply when action is taken to avoid or minimize a "suspension" of "operations" caused by destruction or corruption of electronic data, or any loss or damage to electronic data, except as provided under the Additional Coverage – Interruption Of Computer Operations.
- c. Electronic data means information, facts or computer programs stored as or on, created or used on, or transmitted to or from computer software (including systems and applications software), on hard or floppy disks, CD-ROMs, tapes, drives, cells, data processing devices or any other repositories of computer software which are used with electronically controlled equipment. The term computer programs, referred to in the foregoing description of electronic data, means a set of related electronic instructions which direct the operations and functions of a computer or device connected to it, which enable the computer or device to receive, process, store, retrieve or send data.

5. Additional Coverages

a. Civil Authority

We will pay for the actual loss of Business Income you sustain and necessary Extra Expense caused by action of civil authority that prohibits access to the described premises due to direct physical loss of or damage to property, other than at the described premises, caused by or resulting from any Covered Cause of Loss.

The coverage for Business Income will begin 72 hours after the time of that action and will apply for a period of up to three consecutive weeks after coverage begins.

The coverage for Extra Expense will begin immediately after the time of that action and will end:

- (1) 3 consecutive weeks after the time of that action; or
 - (2) When your Business Income coverage ends;
- whichever is later.

b. Alterations And New Buildings

We will pay for the actual loss of Business Income you sustain and necessary Extra Expense you incur due to direct physical loss or damage at the described premises caused by or resulting from any Covered Cause of Loss to:

- (1) New buildings or structures, whether complete or under construction;
- (2) Alterations or additions to existing buildings or structures; and
- (3) Machinery, equipment, supplies or building materials located on or within 100 feet of the described premises and:
 - (a) Used in the construction, alterations or additions; or
 - (b) Incidental to the occupancy of new buildings.

If such direct physical loss or damage delays the start of "operations", the "period of restoration" for Business Income Coverage will begin on the date "operations" would have begun if the direct physical loss or damage had not occurred.

c. Extended Business Income

- (1) Business Income Other Than "Rental Value"

If the necessary "suspension" of your "operations" produces a Business Income loss payable under this policy, we will pay for the actual loss of Business Income you incur during the period that:

- (a) Begins on the date property (except "finished stock") is actually repaired, rebuilt or replaced and "operations" are resumed; and
- (b) Ends on the earlier of:
 - (i) The date you could restore your "operations", with reasonable speed, to the level which would generate the business income amount that would have existed if no direct physical loss or damage had occurred; or
 - (ii) 30 consecutive days after the date determined in (1)(a) above.

However, Extended Business Income does not apply to loss of Business Income incurred as a result of unfavorable business conditions caused by the impact of the Covered Cause of Loss in the area where the described premises are located.

Loss of Business Income must be caused by direct physical loss or damage at the described premises caused by or resulting from any Covered Cause of Loss.

(2) "Rental Value"

If the necessary "suspension" of your "operations" produces a "Rental Value" loss payable under this policy, we will pay for the actual loss of "Rental Value" you incur during the period that:

- (a) Begins on the date property is actually repaired, rebuilt or replaced and tenantability is restored; and
- (b) Ends on the earlier of:
 - (i) The date you could restore tenant occupancy, with reasonable speed, to the level which would generate the "Rental Value" that would have existed if no direct physical loss or damage had occurred; or
 - (ii) 30 consecutive days after the date determined in (2)(a) above.

However, Extended Business Income does not apply to loss of "Rental Value" incurred as a result of unfavorable business conditions caused by the impact of the Covered Cause of Loss in the area where the described premises are located.

Loss of "Rental Value" must be caused by direct physical loss or damage at the described premises caused by or resulting from any Covered Cause of Loss.

d. Interruption Of Computer Operations

- (1) Under this Additional Coverage, electronic data has the meaning described under Additional Limitation – Interruption Of Computer Operations.
- (2) Subject to all provisions of this Additional Coverage, you may extend the insurance that applies to Business Income and Extra Expense to apply to a "suspension" of "operations" caused by an interruption in computer operations due to destruction or corruption of electronic data due to a Covered Cause of Loss.
- (3) With respect to the coverage provided under this Additional Coverage, the Covered Causes of Loss are subject to the following:
 - (a) If the Causes Of Loss – Special Form applies, coverage under this Additional Coverage – Interruption Of Computer Operations is limited to the "specified causes of loss" as defined in that form, and Collapse as set forth in that form.
 - (b) If the Causes Of Loss – Broad Form applies, coverage under this Additional Coverage – Interruption Of Computer Operations includes Collapse as set forth in that form.
 - (c) If the Causes Of Loss Form is endorsed to add a Covered Cause of Loss, the additional Covered Cause of Loss does not apply to the coverage provided under this Additional Coverage – Interruption Of Computer Operations.
 - (d) The Covered Causes of Loss include a virus, harmful code or similar instruction introduced into or enacted on a computer system (including electronic data) or a network to which it is connected, designed to damage or destroy any part of the system or disrupt its normal operation. But there is no coverage for an interruption related to manipulation of a computer system (including electronic data) by any employee, including a temporary or leased employee, or by an entity retained by you or for you to inspect, design, install, maintain, repair or replace that system.

- (4) The most we will pay under this Additional Coverage – Interruption of Computer Operations is \$2,500 for all loss sustained and expense incurred in any one policy year, regardless of the number of interruptions or the number of premises, locations or computer systems involved. If loss payment relating to the first interruption does not exhaust this amount, then the balance is available for loss or expense sustained or incurred as a result of subsequent interruptions in that policy year. A balance remaining at the end of a policy year does not increase the amount of insurance in the next policy year. With respect to any interruption which begins in one policy year and continues or results in additional loss or expense in a subsequent policy year(s), all loss and expense is deemed to be sustained or incurred in the policy year in which the interruption began.
- (5) This Additional Coverage – Interruption in Computer Operations does not apply to loss sustained or expense incurred after the end of the "period of restoration", even if the amount of insurance stated in (4) above has not been exhausted.

6. Coverage Extension

If a Coinsurance percentage of 50% or more is shown in the Declarations, you may extend the insurance provided by this Coverage Part as follows:

Newly Acquired Locations

- a. You may extend your Business Income and Extra Expense Coverages to apply to property at any location you acquire other than fairs or exhibitions.
- b. The most we will pay under this Extension, for the sum of Business Income loss and Extra Expense incurred, is \$100,000 at each location.
- c. Insurance under this Extension for each newly acquired location will end when any of the following first occurs:
 - (1) This policy expires;
 - (2) 30 days expire after you acquire or begin to construct the property; or
 - (3) You report values to us.

We will charge you additional premium for values reported from the date you acquire the property.

This Extension is additional insurance. The Additional Condition, Coinsurance, does not apply to this Extension.

B. Limits Of Insurance

The most we will pay for loss in any one occurrence is the applicable Limit of Insurance shown in the Declarations. The limit applicable to the Coverage Extension is in addition to the Limit of Insurance.

Payments under the following coverages will not increase the applicable Limit of Insurance:

1. Alterations and New Buildings;
2. Civil Authority;
3. Extra Expense; or
4. Extended Business Income.

C. Loss Conditions

The following conditions apply in addition to the Common Policy Conditions and the Commercial Property Conditions.

1. Appraisal

If we and you disagree on the amount of Net Income and operating expense or the amount of loss, either may make written demand for an appraisal of the loss. In this event, each party will select a competent and impartial appraiser.

The two appraisers will select an umpire. If they cannot agree, either may request that selection be made by a judge of a court having jurisdiction. The appraisers will state separately the amount of Net Income and operating expense or amount of loss. If they fail to agree, they will submit their differences to the umpire. A decision agreed to by any two will be binding. Each party will:

- a. Pay its chosen appraiser; and
- b. Bear the other expenses of the appraisal and umpire equally.

If there is an appraisal, we will still retain our right to deny the claim.

2. Duties In The Event Of Loss

- a. You must see that the following are done in the event of loss:
- (1) Notify the police if a law may have been broken.
 - (2) Give us prompt notice of the direct physical loss or damage. Include a description of the property involved.
 - (3) As soon as possible, give us a description of how, when, and where the direct physical loss or damage occurred.
 - (4) Take all reasonable steps to protect the Covered Property from further damage, and keep a record of your expenses necessary to protect the Covered Property, for consideration in the settlement of the claim. This will not increase the Limit of Insurance. However, we will not pay for any subsequent loss or damage resulting from a cause of loss that is not a Covered Cause of Loss. Also, if feasible, set the damaged property aside and in the best possible order for examination.
 - (5) As often as may be reasonably required, permit us to inspect the property proving the loss or damage and examine your books and records.
Also permit us to take samples of damaged and undamaged property for inspection, testing and analysis, and permit us to make copies from your books and records.
 - (6) Send us a signed, sworn proof of loss containing the information we request to investigate the claim. You must do this within 60 days after our request. We will supply you with the necessary forms.
 - (7) Cooperate with us in the investigation or settlement of the claim.
 - (8) If you intend to continue your business, you must resume all or part of your "operations" as quickly as possible.
- b. We may examine any insured under oath, while not in the presence of any other insured and at such times as may be reasonably required, about any matter relating to this insurance or the claim, including an insured's books and records. In the event of an examination, an insured's answers must be signed.

3. Loss Determination

- a. The amount of Business Income loss will be determined based on:
- (1) The Net Income of the business before the direct physical loss or damage occurred;
 - (2) The likely Net Income of the business if no physical loss or damage had occurred, but not including any Net Income that would likely have been earned as a result of an increase in the volume of business due to favorable business conditions caused by the impact of the Covered Cause of Loss on customers or on other businesses;
 - (3) The operating expenses, including payroll expenses, necessary to resume "operations" with the same quality of service that existed just before the direct physical loss or damage; and
 - (4) Other relevant sources of information, including:
 - (a) Your financial records and accounting procedures;
 - (b) Bills, invoices and other vouchers; and
 - (c) Deeds, liens or contracts.
- b. The amount of Extra Expense will be determined based on:
- (1) All expenses that exceed the normal operating expenses that would have been incurred by "operations" during the "period of restoration" if no direct physical loss or damage had occurred. We will deduct from the total of such expenses:
 - (a) The salvage value that remains of any property bought for temporary use during the "period of restoration", once "operations" are resumed; and
 - (b) Any Extra Expense that is paid for by other insurance, except for insurance that is written subject to the same plan, terms, conditions and provisions as this insurance; and
 - (2) Necessary expenses that reduce the Business Income loss that otherwise would have been incurred.

c. Resumption Of Operations

We will reduce the amount of your:

(1) Business Income loss, other than Extra Expense, to the extent you can resume your "operations", in whole or in part, by using damaged or undamaged property (including merchandise or stock) at the described premises or elsewhere.

(2) Extra Expense loss to the extent you can return "operations" to normal and discontinue such Extra Expense.

d. If you do not resume "operations", or do not resume "operations" as quickly as possible, we will pay based on the length of time it would have taken to resume "operations" as quickly as possible.

4. Loss Payment

We will pay for covered loss within 30 days after we receive the sworn proof of loss, if you have complied with all of the terms of this Coverage Part and:

a. We have reached agreement with you on the amount of loss; or

b. An appraisal award has been made.

D. Additional Condition

Coinsurance

If a Coinsurance percentage is shown in the Declarations, the following condition applies in addition to the Common Policy Conditions and the Commercial Property Conditions.

We will not pay the full amount of any Business Income loss if the Limit of Insurance for Business Income is less than:

a. The Coinsurance percentage shown for Business Income in the Declarations; times

b. The sum of:

(1) The Net Income (Net Profit or Loss before income taxes), and

(2) Operating expenses, including payroll expenses,

that would have been earned or incurred (had no loss occurred) by your "operations" at the described premises for the 12 months following the inception, or last previous anniversary date, of this policy (whichever is later).

Instead, we will determine the most we will pay using the following steps:

1. Multiply the Net Income and operating expense for the 12 months following the inception, or last previous anniversary date, of this policy by the Coinsurance percentage;

2. Divide the Limit of Insurance for the described premises by the figure determined in Step 1.; and

3. Multiply the total amount of loss by the figure determined in Step 2.

We will pay the amount determined in Step 3. or the limit of insurance, whichever is less. For the remainder, you will either have to rely on other insurance or absorb the loss yourself.

In determining operating expenses for the purpose of applying the Coinsurance condition, the following expenses, if applicable, shall be deducted from the total of all operating expenses:

1. Prepaid freight – outgoing;

2. Returns and allowances;

3. Discounts;

4. Bad debts;

5. Collection expenses;

6. Cost of raw stock and factory supplies consumed (including transportation charges);

7. Cost of merchandise sold (including transportation charges);

8. Cost of other supplies consumed (including transportation charges);

- 9. Cost of services purchased from outsiders (not employees) to resell, that do not continue under contract;
- 10. Power, heat and refrigeration expenses that do not continue under contract (if Form **CP 15 11** is attached);
- 11. All ordinary payroll expenses or the amount of payroll expense excluded (if Form **CP 15 10** is attached); and
- 12. Special deductions for mining properties (royalties unless specifically included in coverage; actual depletion commonly known as unit or cost depletion – not percentage depletion; welfare and retirement fund charges based on tonnage; hired trucks).

Example No. 1 (Underinsurance):

When: The Net Income and operating expenses for the 12 months following the inception, or last previous anniversary date, of this policy at the described premises would have been \$ 400,000
 The Coinsurance percentage is 50%
 The Limit of Insurance is \$ 150,000
 The amount of loss is \$ 80,000

Step 1: $\$400,000 \times 50\% = \$200,000$
 (the minimum amount of insurance to meet your Coinsurance requirements)

Step 2: $\$150,000 / \$200,000 = .75$

Step 3: $\$80,000 \times .75 = \$60,000$

We will pay no more than \$60,000. The remaining \$20,000 is not covered.

Example No. 2 (Adequate Insurance):

When: The Net Income and operating expenses for the 12 months following the inception, or last previous anniversary date, of this policy at the described premises would have been \$ 400,000
 The Coinsurance percentage is 50%
 The Limit of Insurance is \$ 200,000
 The amount of loss is \$ 80,000

The minimum amount of insurance to meet your Coinsurance requirement is \$200,000 ($\$400,000 \times 50\%$). Therefore, the Limit of Insurance in this Example is adequate and no penalty applies. We will pay no more than \$80,000 (amount of loss).

This condition does not apply to Extra Expense coverage.

E. Optional Coverages

If shown as applicable in the Declarations, the following Optional Coverages apply separately to each item.

1. Maximum Period Of Indemnity

- a. The Additional Condition, Coinsurance, does not apply to this Coverage Form at the described premises to which this Optional Coverage applies.
- b. The most we will pay for the total of Business Income loss and Extra Expense is the lesser of:
 - (1) The amount of loss sustained and expenses incurred during the 120 days immediately following the beginning of the "period of restoration"; or
 - (2) The Limit of Insurance shown in the Declarations.

2. Monthly Limit Of Indemnity

- a. The Additional Condition, Coinsurance, does not apply to this Coverage Form at the described premises to which this Optional Coverage applies.
- b. The most we will pay for loss of Business Income in each period of 30 consecutive days after the beginning of the "period of restoration" is:
 - (1) The Limit of Insurance, multiplied by
 - (2) The fraction shown in the Declarations for this Optional Coverage.

Example:

When:	The Limit of Insurance is	\$ 120,000
	The fraction shown in the Declarations for this Optional Coverage is	
		1/4
	The most we will pay for loss in each period of 30 consecutive days is:	
	\$120,000 x 1/4 = \$30,000	
	If, in this example, the actual amount of loss is:	
	Days 1-30	\$ 40,000
	Days 31-60	20,000
	Days 61-90	<u>30,000</u>
		\$ 90,000
	We will pay:	
	Days 1-30	\$ 30,000
	Days 31-60	20,000
	Days 61-90	<u>30,000</u>
		\$ 80,000

The remaining \$10,000 is not covered.

3. Business Income Agreed Value

- a. To activate this Optional Coverage:
 - (1) A Business Income Report/Work Sheet must be submitted to us and must show financial data for your "operations":
 - (a) During the 12 months prior to the date of the Work Sheet; and
 - (b) Estimated for the 12 months immediately following the inception of this Optional Coverage.
 - (2) The Declarations must indicate that the Business Income Agreed Value Optional Coverage applies, and an Agreed Value must be shown in the Declarations. The Agreed Value should be at least equal to:
 - (a) The Coinsurance percentage shown in the Declarations; multiplied by
 - (b) The amount of Net Income and operating expenses for the following 12 months you report on the Work Sheet.
- b. The Additional Condition, Coinsurance, is suspended until:
 - (1) 12 months after the effective date of this Optional Coverage; or
 - (2) The expiration date of this policy;
 whichever occurs first.
- c. We will reinstate the Additional Condition, Coinsurance, automatically if you do not submit a new Work Sheet and Agreed Value:
 - (1) Within 12 months of the effective date of this Optional Coverage; or
 - (2) When you request a change in your Business Income Limit of Insurance.

d. If the Business Income Limit of Insurance is less than the Agreed Value, we will not pay more of any loss than the amount of loss multiplied by:

(1) The Business Income Limit of Insurance; divided by

(2) The Agreed Value.

Example:

When: The Limit of Insurance is \$ 100,000
 The Agreed Value is \$ 200,000
 The amount of loss is \$ 80,000

Step (a): \$100,000 / \$200,000 = .50

Step (b): .50 x \$80,000 = \$40,000

We will pay \$40,000. The remaining \$40,000 is not covered.

4. Extended Period Of Indemnity

Under Paragraph **A.5.c.**, Extended Business Income, the number "30" in Subparagraphs **(1)(b)** and **(2)(b)** is replaced by the number shown in the Declarations for this Optional Coverage.

F. Definitions

1. "Finished Stock" means stock you have manufactured.

"Finished stock" also includes whiskey and alcoholic products being aged, unless there is a Coinsurance percentage shown for Business Income in the Declarations.

"Finished stock" does not include stock you have manufactured that is held for sale on the premises of any retail outlet insured under this Coverage Part.

2. "Operations" means:

a. Your business activities occurring at the described premises; and

b. The tenantability of the described premises, if coverage for Business Income including "Rental Value" or "Rental Value" applies.

3. "Period of Restoration" means the period of time that:

a. Begins:

(1) 72 hours after the time of direct physical loss or damage for Business Income coverage; or

(2) Immediately after the time of direct physical loss or damage for Extra Expense coverage;

caused by or resulting from any Covered Cause of Loss at the described premises; and

b. Ends on the earlier of:

(1) The date when the property at the described premises should be repaired, rebuilt or replaced with reasonable speed and similar quality; or

(2) The date when business is resumed at a new permanent location.

"Period of restoration" does not include any increased period required due to the enforcement of any ordinance or law that:

(1) Regulates the construction, use or repair, or requires the tearing down of any property; or

(2) Requires any insured or others to test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of "pollutants".

The expiration date of this policy will not cut short the "period of restoration".

4. "Pollutants" means any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals and waste. Waste includes materials to be recycled, reconditioned or reclaimed.

5. "Rental Value" means Business Income that consists of:
- a. Net Income (Net Profit or Loss before income taxes) that would have been earned or incurred as rental income from tenant occupancy of the premises described in the Declarations as furnished and equipped by you, including fair rental value of any portion of the described premises which is occupied by you; and
 - b. Continuing normal operating expenses incurred in connection with that premises, including:
 - (1) Payroll; and
 - (2) The amount of charges which are the legal obligation of the tenant(s) but would otherwise be your obligations.
6. "Suspension" means:
- a. The slowdown or cessation of your business activities; or
 - b. That a part or all of the described premises is rendered untenable, if coverage for Business Income including "Rental Value" or "Rental Value" applies.

COMMERCIAL PROPERTY CONDITIONS

This Coverage Part is subject to the following conditions, the Common Policy Conditions and applicable Loss Conditions and Additional Conditions in Commercial Property Coverage Forms.

A. CONCEALMENT, MISREPRESENTATION OR FRAUD

This Coverage Part is void in any case of fraud by you as it relates to this Coverage Part at any time. It is also void if you or any other insured, at any time, intentionally conceal or misrepresent a material fact concerning:

1. This Coverage Part;
2. The Covered Property;
3. Your interest in the Covered Property; or
4. A claim under this Coverage Part.

B. CONTROL OF PROPERTY

Any act or neglect of any person other than you beyond your direction or control will not affect this insurance.

The breach of any condition of this Coverage Part at any one or more locations will not affect coverage at any location where, at the time of loss or damage, the breach of condition does not exist.

C. INSURANCE UNDER TWO OR MORE COVERAGES

If two or more of this policy's coverages apply to the same loss or damage, we will not pay more than the actual amount of the loss or damage.

D. LEGAL ACTION AGAINST US

No one may bring a legal action against us under this Coverage Part unless:

1. There has been full compliance with all of the terms of this Coverage Part; and
2. The action is brought within 2 years after the date on which the direct physical loss or damage occurred.

E. LIBERALIZATION

If we adopt any revision that would broaden the coverage under this Coverage Part without additional premium within 45 days prior to or during the policy period, the broadened coverage will immediately apply to this Coverage Part.

F. NO BENEFIT TO BAILEE

No person or organization, other than you, having custody of Covered Property will benefit from this insurance.

G. OTHER INSURANCE

1. You may have other insurance subject to the same plan, terms, conditions and provisions as the insurance under this Coverage Part. If you do, we will pay our share of the covered loss or damage. Our share is the proportion that the applicable Limit of Insurance under this Coverage Part bears to the Limits Of Insurance of all insurance covering on the same basis.
2. If there is other insurance covering the same loss or damage, other than that described in 1. above, we will pay only for the amount of covered loss or damage in excess of the amount due from that other insurance, whether you can collect on it or not. But we will not pay more than the applicable Limit of Insurance.

H. POLICY PERIOD, COVERAGE TERRITORY

Under this Coverage Part:

1. We cover loss or damage commencing:
 - a. During the policy period shown in the Declarations; and
 - b. Within the coverage territory.
2. The coverage territory is:
 - a. The United States of America (including its territories and possessions);
 - b. Puerto Rico; and
 - c. Canada.

I. TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

If any person or organization to or for whom we make payment under this Coverage Part has rights to recover damages from another, those rights are transferred to us to the extent of our payment. That person or organization must do everything necessary to secure our rights and must do nothing after loss to impair them. But you may waive your rights against another party in writing:

1. Prior to a loss to your Covered Property or Covered Income.
2. After a loss to your Covered Property or Covered Income only if, at time of loss, that party is one of the following:
 - a. Someone insured by this insurance;
 - b. A business firm:
 - (1) Owned or controlled by you; or
 - (2) That owns or controls you; or
 - c. Your tenant.

This will not restrict your insurance.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION OF LOSS DUE TO VIRUS OR BACTERIA

This endorsement modifies insurance provided under the following:

COMMERCIAL PROPERTY COVERAGE PART
STANDARD PROPERTY POLICY

- A.** The exclusion set forth in Paragraph **B.** applies to all coverage under all forms and endorsements that comprise this Coverage Part or Policy, including but not limited to forms or endorsements that cover property damage to buildings or personal property and forms or endorsements that cover business income, extra expense or action of civil authority.
- B.** We will not pay for loss or damage caused by or resulting from any virus, bacterium or other microorganism that induces or is capable of inducing physical distress, illness or disease.

However, this exclusion does not apply to loss or damage caused by or resulting from “fungus”, wet rot or dry rot. Such loss or damage is addressed in a separate exclusion in this Coverage Part or Policy.
- C.** With respect to any loss or damage subject to the exclusion in Paragraph **B.**, such exclusion supersedes any exclusion relating to “pollutants”.
- D.** The following provisions in this Coverage Part or Policy are hereby amended to remove reference to bacteria:
 - 1.** Exclusion of “Fungus”, Wet Rot, Dry Rot And Bacteria; and
 - 2.** Additional Coverage – Limited Coverage for “Fungus”, Wet Rot, Dry Rot And Bacteria, including any endorsement increasing the scope or amount of coverage.
- E.** The terms of the exclusion in Paragraph **B.**, or the inapplicability of this exclusion to a particular loss, do not serve to create coverage for any loss that would otherwise be excluded under this Coverage Part or Policy.

QUICK REFERENCE

COMMERCIAL PROPERTY COVERAGE PART

READ YOUR POLICY CAREFULLY

The Commercial Property Coverage Part in your policy consists of Declarations, one or more Coverage Forms, Commercial Property Conditions, Common Policy Conditions and Endorsements, if applicable. Following is a Quick Reference indexing of the principal provisions contained in each of the components making up the Coverage Part, listed in sequential order, except for the provisions in the Declarations which may not be in the sequence shown.

DECLARATIONS

- Named Insured and Mailing Address
- Policy Period
- Description of Business
- Coverage Provided and Limits of Insurance
- Optional Coverages
- Forms and Endorsements applying to the Coverage Part at time of issue

COVERAGE FORM(S)

COVERAGE

- Covered Property (If Applicable)
- Property Not Covered (If Applicable)
- Covered Causes of Loss (If Applicable)
- Additional Coverage (If Applicable)
- Coverage Extensions (If Applicable)

EXCLUSIONS

LIMITS OF INSURANCE

- DEDUCTIBLE (If Applicable)
- LOSS CONDITIONS (If Applicable)
- ADDITIONAL CONDITIONS (If Applicable)
- OPTIONAL COVERAGES (If Applicable)
- DEFINITIONS (If Applicable)

CAUSES OF LOSS FORM (If Applicable)

- Covered Causes of Loss
- Exclusions
- Limitations (If Applicable)
- Additional Coverage (If Applicable)

COMMERCIAL PROPERTY CONDITIONS (CP OO 90)

- Concealment, Misrepresentation and Fraud
- Control of Property
- Insurance Under Two or More Coverages
- Legal Action Against Us
- Liberalization
- No Benefit to Bailee
- Other Insurance
- Policy Period, Coverage Territory
- Transfer of Rights of Recovery Against Others to Us

COMMON POLICY CONDITIONS (IL OO 17)

- Cancellation
- Changes
- Examination of Your Books and Records
- Inspections and Surveys
- Premiums
- Transfer of Your Rights and Duties Under This Policy

ENDORSEMENTS (If Any)

Includes copyright material of Insurance Services Office, Inc., with its permission.
Copyright, Insurance Services Office, Inc., 1983

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

CANCELLATION CHANGES

This endorsement modifies insurance provided under the following:

COMMERCIAL PROPERTY COVERAGE PART

The following is added to the CANCELLATION Common Policy Condition:

If any one of the following conditions exists at any building that is Covered Property in this policy, we may cancel this Coverage Part by mailing or delivering to the first Named Insured written notice of cancellation at least 5 days before the effective date of cancellation.

A. The building has been vacant or unoccupied 60 or more consecutive days. This does not apply to:

1. Seasonal unoccupancy;
2. Buildings in the course of construction, renovation or addition; or
3. Buildings to which the Vacancy Permit endorsement applies.

Buildings with 65% or more of the rental units or floor area vacant or unoccupied are considered unoccupied under this provision.

B. After damage by a covered cause of loss, permanent repairs to the building:

1. Have not started, and
 2. Have not been contracted for,
- within 30 days of initial payment of loss.

C. The building has:

1. An outstanding order to vacate;
2. An outstanding demolition order; or
3. Been declared unsafe by governmental authority.

D. Fixed and salvageable items have been or are being removed from the building and are not being replaced. This does not apply to such removal that is necessary or incidental to any renovation or remodeling.

E. Failure to:

1. Furnish necessary heat, water, sewer service or electricity for 30 consecutive days or more, except during a period of seasonal unoccupancy; or
2. Pay property taxes that are owing and have been outstanding for more than one year following the date due, except that this provision will not apply where you are in a bona fide dispute with the taxing authority regarding payment of such taxes.

CAUSES OF LOSS – SPECIAL FORM

Words and phrases that appear in quotation marks have special meaning. Refer to Section F. – Definitions.

A. Covered Causes Of Loss

When Special is shown in the Declarations, Covered Causes of Loss means Risks Of Direct Physical Loss unless the loss is:

1. Excluded in Section B., Exclusions; or
 2. Limited in Section C., Limitations;
- that follow.

B. Exclusions

1. We will not pay for loss or damage caused directly or indirectly by any of the following. Such loss or damage is excluded regardless of any other cause or event that contributes concurrently or in any sequence to the loss.

a. Ordinance Or Law

The enforcement of any ordinance or law:

- (1) Regulating the construction, use or repair of any property; or
- (2) Requiring the tearing down of any property, including the cost of removing its debris.

This exclusion, Ordinance Or Law, applies whether the loss results from:

- (1) An ordinance or law that is enforced even if the property has not been damaged; or
- (2) The increased costs incurred to comply with an ordinance or law in the course of construction, repair, renovation, remodeling or demolition of property, or removal of its debris, following a physical loss to that property.

b. Earth Movement

- (1) Earthquake, including any earth sinking, rising or shifting related to such event;
- (2) Landslide, including any earth sinking, rising or shifting related to such event;
- (3) Mine subsidence, meaning subsidence of a man-made mine, whether or not mining activity has ceased;
- (4) Earth sinking (other than sinkhole collapse), rising or shifting including soil conditions which cause settling, cracking or other disarrangement of foundations or other parts of realty. Soil conditions include contraction, expansion, freezing, thawing, erosion, improperly compacted soil and the action of water under the ground surface.

But if Earth Movement, as described in **b.(1)** through **(4)** above, results in fire or explosion, we will pay for the loss or damage caused by that fire or explosion.

- (5) Volcanic eruption, explosion or effusion. But if volcanic eruption, explosion or effusion results in fire, building glass breakage or Volcanic Action, we will pay for the loss or damage caused by that fire, building glass breakage or Volcanic Action.

Volcanic action means direct loss or damage resulting from the eruption of a volcano when the loss or damage is caused by:

- (a) Airborne volcanic blast or airborne shock waves;
- (b) Ash, dust or particulate matter; or
- (c) Lava flow.

All volcanic eruptions that occur within any 168 hour period will constitute a single occurrence.

Volcanic action does not include the cost to remove ash, dust or particulate matter that does not cause direct physical loss or damage to the described property.

c. Governmental Action

Seizure or destruction of property by order of governmental authority.

But we will pay for loss or damage caused by or resulting from acts of destruction ordered by governmental authority and taken at the time of a fire to prevent its spread, if the fire would be covered under this Coverage Part.

d. Nuclear Hazard

Nuclear reaction or radiation, or radioactive contamination, however caused.

But if nuclear reaction or radiation, or radioactive contamination, results in fire, we will pay for the loss or damage caused by that fire.

e. Utility Services

The failure of power or other utility service supplied to the described premises, however caused, if the failure occurs away from the described premises. Failure includes lack of sufficient capacity and reduction in supply.

But if the failure of power or other utility service results in a Covered Cause of Loss, we will pay for the loss or damage caused by that Covered Cause of Loss.

This exclusion does not apply to the Business Income coverage or to Extra Expense coverage. Instead, the Special Exclusion in Paragraph **B.4.a.(1)** applies to these coverages.

f. War And Military Action

- (1) War, including undeclared or civil war;
- (2) Warlike action by a military force, including action in hindering or defending against an actual or expected attack, by any government, sovereign or other authority using military personnel or other agents; or
- (3) Insurrection, rebellion, revolution, usurped power, or action taken by governmental authority in hindering or defending against any of these.

g. Water

- (1) Flood, surface water, waves, tides, tidal waves, overflow of any body of water, or their spray, all whether driven by wind or not;
- (2) Mudslide or mudflow;
- (3) Water that backs up or overflows from a sewer, drain or sump; or
- (4) Water under the ground surface pressing on, or flowing or seeping through:
 - (a) Foundations, walls, floors or paved surfaces;
 - (b) Basements, whether paved or not; or
 - (c) Doors, windows or other openings.

But if Water, as described in **g.(1)** through **g.(4)** above, results in fire, explosion or sprinkler leakage, we will pay for the loss or damage caused by that fire, explosion or sprinkler leakage.

h. "Fungus", Wet Rot, Dry Rot And Bacteria

Presence, growth, proliferation, spread or any activity of "fungus", wet or dry rot or bacteria.

But if "fungus", wet or dry rot or bacteria results in a "specified cause of loss", we will pay for the loss or damage caused by that "specified cause of loss".

This exclusion does not apply:

- 1. When "fungus", wet or dry rot or bacteria results from fire or lightning; or
- 2. To the extent that coverage is provided in the Additional Coverage – Limited Coverage For "Fungus", Wet Rot, Dry Rot And Bacteria with respect to loss or damage by a cause of loss other than fire or lightning.

Exclusions **B.1.a.** through **B.1.h.** apply whether or not the loss event results in widespread damage or affects a substantial area.

2. We will not pay for loss or damage caused by or resulting from any of the following:

- a. Artificially generated electrical current, including electric arcing, that disturbs electrical devices, appliances or wires.

But if artificially generated electrical current results in fire, we will pay for the loss or damage caused by that fire.

- b. Delay, loss of use or loss of market.

- c. Smoke, vapor or gas from agricultural smudging or industrial operations.

- d.(1) Wear and tear;

- (2) Rust or other corrosion, decay, deterioration, hidden or latent defect or any quality in property that causes it to damage or destroy itself;

- (3) Smog;

- (4) Settling, cracking, shrinking or expansion;

- (5) Nesting or infestation, or discharge or release of waste products or secretions, by insects, birds, rodents or other animals.

- (6) Mechanical breakdown, including rupture or bursting caused by centrifugal force. But if mechanical breakdown results in elevator collision, we will pay for the loss or damage caused by that elevator collision.

- (7) The following causes of loss to personal property:

- (a) Dampness or dryness of atmosphere;

- (b) Changes in or extremes of temperature; or

- (c) Marring or scratching.

But if an excluded cause of loss that is listed in **2.d.(1)** through **(7)** results in a "specified cause of loss" or building glass breakage, we will pay for the loss or damage caused by that "specified cause of loss" or building glass breakage.

- e. Explosion of steam boilers, steam pipes, steam engines or steam turbines owned or leased by you, or operated under your control. But if explosion of steam boilers, steam pipes, steam engines or steam turbines results in fire or combustion explosion, we will pay for the loss or damage caused by that fire or combustion explosion. We will also pay for loss or damage caused by or resulting from the explosion of gases or fuel within the furnace of any fired vessel or within the flues or passages through which the gases of combustion pass.

- f. Continuous or repeated seepage or leakage of water, or the presence or condensation of humidity, moisture or vapor, that occurs over a period of 14 days or more.

- g. Water, other liquids, powder or molten material that leaks or flows from plumbing, heating, air conditioning or other equipment (except fire protective systems) caused by or resulting from freezing, unless:

- (1) You do your best to maintain heat in the building or structure; or

- (2) You drain the equipment and shut off the supply if the heat is not maintained.

- h. Dishonest or criminal act by you, any of your partners, members, officers, managers, employees (including leased employees), directors, trustees, authorized representatives or anyone to whom you entrust the property for any purpose:

- (1) Acting alone or in collusion with others; or

- (2) Whether or not occurring during the hours of employment.

This exclusion does not apply to acts of destruction by your employees (including leased employees); but theft by employees (including leased employees) is not covered.

- i. Voluntary parting with any property by you or anyone else to whom you have entrusted the property if induced to do so by any fraudulent scheme, trick, device or false pretense.

- j. Rain, snow, ice or sleet to personal property in the open.

- k. Collapse, except as provided below in the Additional Coverage for Collapse. But if collapse results in a Covered Cause of Loss at the described premises, we will pay for the loss or damage caused by that Covered Cause of Loss.
- l. Discharge, dispersal, seepage, migration, release or escape of "pollutants" unless the discharge, dispersal, seepage, migration, release or escape is itself caused by any of the "specified causes of loss". But if the discharge, dispersal, seepage, migration, release or escape of "pollutants" results in a "specified cause of loss", we will pay for the loss or damage caused by that "specified cause of loss".

This exclusion, **l.**, does not apply to damage to glass caused by chemicals applied to the glass.

- m. Neglect of an insured to use all reasonable means to save and preserve property from further damage at and after the time of loss.
- 3.** We will not pay for loss or damage caused by or resulting from any of the following, **3.a.** through **3.c.** But if an excluded cause of loss that is listed in **3.a.** through **3.c.** results in a Covered Cause of Loss, we will pay for the loss or damage caused by that Covered Cause of Loss.
- a. Weather conditions. But this exclusion only applies if weather conditions contribute in any way with a cause or event excluded in Paragraph **1.** above to produce the loss or damage.
 - b. Acts or decisions, including the failure to act or decide, of any person, group, organization or governmental body.
 - c. Faulty, inadequate or defective:
 - (1) Planning, zoning, development, surveying, siting;
 - (2) Design, specifications, workmanship, repair, construction, renovation, remodeling, grading, compaction;
 - (3) Materials used in repair, construction, renovation or remodeling; or
 - (4) Maintenance;
 of part or all of any property on or off the described premises.

4. Special Exclusions

The following provisions apply only to the specified Coverage Forms.

a. Business Income (And Extra Expense) Coverage Form, Business Income (Without Extra Expense) Coverage Form, Or Extra Expense Coverage Form

We will not pay for:

- (1) Any loss caused directly or indirectly by the failure of power or other utility service supplied to the described premises, however caused, if the failure occurs outside of a covered building. Failure includes lack of sufficient capacity and reduction in supply.
But if the failure of power or other utility service results in a Covered Cause of Loss, we will pay for the loss resulting from that Covered Cause of Loss.
- (2) Any loss caused by or resulting from:
 - (a) Damage or destruction of "finished stock"; or
 - (b) The time required to reproduce "finished stock".
 This exclusion does not apply to Extra Expense.
- (3) Any loss caused by or resulting from direct physical loss or damage to radio or television antennas (including satellite dishes) and their lead-in wiring, masts or towers.
- (4) Any increase of loss caused by or resulting from:
 - (a) Delay in rebuilding, repairing or replacing the property or resuming "operations", due to interference at the location of the rebuilding, repair or replacement by strikers or other persons; or
 - (b) Suspension, lapse or cancellation of any license, lease or contract. But if the suspension, lapse or cancellation is directly caused by the "suspension" of "operations", we will cover such loss that affects your Business Income during the "period of restoration" and any extension of the "period of restoration" in accordance with the terms of the Extended Business Income Additional Coverage and the Extended Period Of Indemnity Optional Coverage or any variation of these.

- (5) Any Extra Expense caused by or resulting from suspension, lapse or cancellation of any license, lease or contract beyond the "period of restoration".
- (6) Any other consequential loss.

b. Leasehold Interest Coverage Form

- (1) Paragraph **B.1.a.** Ordinance Or Law, does not apply to insurance under this Coverage Form.
- (2) We will not pay for any loss caused by:
 - (a) Your cancelling the lease;
 - (b) The suspension, lapse or cancellation of any license; or
 - (c) Any other consequential loss.

c. Legal Liability Coverage Form

- (1) The following exclusions do not apply to insurance under this Coverage Form:
 - (a) Paragraph **B.1.a.**, Ordinance Or Law;
 - (b) Paragraph **B.1.c.**, Governmental Action;
 - (c) Paragraph **B.1.d.**, Nuclear Hazard;
 - (d) Paragraph **B.1.e.**, Utility Services; and
 - (e) Paragraph **B.1.f.**, War And Military Action.
- (2) The following additional exclusions apply to insurance under this Coverage Form:

(a) Contractual Liability

We will not defend any claim or "suit", or pay damages that you are legally liable to pay, solely by reason of your assumption of liability in a contract or agreement. But this exclusion does not apply to a written lease agreement in which you have assumed liability for building damage resulting from an actual or attempted burglary or robbery, provided that:

- (i) Your assumption of liability was executed prior to the accident; and
- (ii) The building is Covered Property under this Coverage Form.

(b) Nuclear Hazard

We will not defend any claim or "suit", or pay any damages, loss, expense or obligation, resulting from nuclear reaction or radiation, or radioactive contamination, however caused.

C. Limitations

The following limitations apply to all policy forms and endorsements, unless otherwise stated.

- 1. We will not pay for loss of or damage to property, as described and limited in this section. In addition, we will not pay for any loss that is a consequence of loss or damage as described and limited in this section.
 - a. Steam boilers, steam pipes, steam engines or steam turbines caused by or resulting from any condition or event inside such equipment. But we will pay for loss of or damage to such equipment caused by or resulting from an explosion of gases or fuel within the furnace of any fired vessel or within the flues or passages through which the gases of combustion pass.
 - b. Hot water boilers or other water heating equipment caused by or resulting from any condition or event inside such boilers or equipment, other than an explosion.
 - c. The interior of any building or structure, or to personal property in the building or structure, caused by or resulting from rain, snow, sleet, ice, sand or dust, whether driven by wind or not, unless:
 - (1) The building or structure first sustains damage by a Covered Cause of Loss to its roof or walls through which the rain, snow, sleet, ice, sand or dust enters; or
 - (2) The loss or damage is caused by or results from thawing of snow, sleet or ice on the building or structure.

- d. Building materials and supplies not attached as part of the building or structure, caused by or resulting from theft.

However, this limitation does not apply to:

- (1) Building materials and supplies held for sale by you, unless they are insured under the Builders Risk Coverage Form; or

- (2) Business Income coverage or Extra Expense coverage.

- e. Property that is missing, where the only evidence of the loss or damage is a shortage disclosed on taking inventory, or other instances where there is no physical evidence to show what happened to the property.

- f. Property that has been transferred to a person or to a place outside the described premises on the basis of unauthorized instructions.

- 2. We will not pay for loss of or damage to the following types of property unless caused by the "specified causes of loss" or building glass breakage:

- a. Animals, and then only if they are killed or their destruction is made necessary.

- b. Fragile articles such as statuary, marbles, chinaware and porcelains, if broken. This restriction does not apply to:

- (1) Glass; or

- (2) Containers of property held for sale.

- c. Builders' machinery, tools and equipment owned by you or entrusted to you, provided such property is Covered Property.

However, this limitation does not apply:

- (1) If the property is located on or within 100 feet of the described premises, unless the premises is insured under the Builders Risk Coverage Form; or

- (2) To Business Income coverage or to Extra Expense coverage.

- 3. The special limit shown for each category, a. through d., is the total limit for loss of or damage to all property in that category. The special limit applies to any one occurrence of theft, regardless of the types or number of articles that are lost or damaged in that occurrence. The special limits are:

- a. \$2,500 for furs, fur garments and garments trimmed with fur.

- b. \$2,500 for jewelry, watches, watch movements, jewels, pearls, precious and semi-precious stones, bullion, gold, silver, platinum and other precious alloys or metals. This limit does not apply to jewelry and watches worth \$100 or less per item.

- c. \$2,500 for patterns, dies, molds and forms.

- d. \$250 for stamps, tickets, including lottery tickets held for sale, and letters of credit.

These special limits are part of, not in addition to, the Limit of Insurance applicable to the Covered Property.

This limitation, **C.3.**, does not apply to Business Income coverage or to Extra Expense coverage.

- 4. We will not pay the cost to repair any defect to a system or appliance from which water, other liquid, powder or molten material escapes. But we will pay the cost to repair or replace damaged parts of fire extinguishing equipment if the damage:

- a. Results in discharge of any substance from an automatic fire protection system; or

- b. Is directly caused by freezing.

However, this limitation does not apply to Business Income coverage or to Extra Expense coverage.

D. Additional Coverage – Collapse

The term Covered Cause of Loss includes the Additional Coverage – Collapse as described and limited in **D.1.** through **D.5.** below.

- 1. With respect to buildings:

- a. Collapse means an abrupt falling down or caving in of a building or any part of a building with the result that the building or part of the building cannot be occupied for its intended purpose;

- b. A building or any part of a building that is in danger of falling down or caving in is not considered to be in a state of collapse;

- c. A part of a building that is standing is not considered to be in a state of collapse even if it has separated from another part of the building;
 - d. A building that is standing or any part of a building that is standing is not considered to be in a state of collapse even if it shows evidence of cracking, bulging, sagging, bending, leaning, settling, shrinkage or expansion.
2. We will pay for direct physical loss or damage to Covered Property, caused by collapse of a building or any part of a building that is insured under this Coverage Form or that contains Covered Property insured under this Coverage Form, if the collapse is caused by one or more of the following:
- a. The "specified causes of loss" or breakage of building glass, all only as insured against in this Coverage Part;
 - b. Decay that is hidden from view, unless the presence of such decay is known to an insured prior to collapse;
 - c. Insect or vermin damage that is hidden from view, unless the presence of such damage is known to an insured prior to collapse;
 - d. Weight of people or personal property;
 - e. Weight of rain that collects on a roof;
 - f. Use of defective material or methods in construction, remodeling or renovation if the collapse occurs during the course of the construction, remodeling or renovation. However, if the collapse occurs after construction, remodeling or renovation is complete and is caused in part by a cause of loss listed in **2.a.** through **2.e.**, we will pay for the loss or damage even if use of defective material or methods, in construction, remodeling or renovation, contributes to the collapse.

The criteria set forth in **1.a.** through **1.d.** do not limit the coverage otherwise provided under this Causes of Loss Form for the causes of loss listed in **2.a.**, **2.d.** and **2.e.**

3. With respect to the following property:
- a. Outdoor radio or television antennas (including satellite dishes) and their lead-in wiring, masts or towers;
 - b. Awnings, gutters and downspouts;
 - c. Yard fixtures;
 - d. Outdoor swimming pools;
 - e. Fences;
 - f. Piers, wharves and docks;
 - g. Beach or diving platforms or appurtenances;
 - h. Retaining walls; and
 - i. Walks, roadways and other paved surfaces;
- if the collapse is caused by a cause of loss listed in **2.b.** through **2.f.**, we will pay for loss or damage to that property only if:
- a. Such loss or damage is a direct result of the collapse of a building insured under this Coverage Form; and
 - b. The property is Covered Property under this Coverage Form.
4. If personal property abruptly falls down or caves in and such collapse is not the result of collapse of a building, we will pay for loss or damage to Covered Property caused by such collapse of personal property only if:
- a. The collapse was caused by a Cause of Loss listed in **2.a.** through **2.f.** above;
 - b. The personal property which collapses is inside a building; and
 - c. The property which collapses is not of a kind listed in **3.** above, regardless of whether that kind of property is considered to be personal property or real property.

The coverage stated in this Paragraph **4.** does not apply to personal property if marring and/or scratching is the only damage to that personal property caused by the collapse.

Collapse of personal property does not mean cracking, bulging, sagging, bending, leaning, settling, shrinkage or expansion.

5. This Additional Coverage, Collapse, will not increase the Limits of Insurance provided in this Coverage Part.

E. Additional Coverage – Limited Coverage For "Fungus", Wet Rot, Dry Rot And Bacteria

1. The coverage described in **E.2.** and **E.6.** only applies when the "fungus", wet or dry rot or bacteria is the result of one or more of the following causes that occurs during the policy period and only if all reasonable means were used to save and preserve the property from further damage at the time of and after that occurrence.
 - a. A "specified cause of loss" other than fire or lightning; or
 - b. Flood, if the Flood Coverage Endorsement applies to the affected premises.
2. We will pay for loss or damage by "fungus", wet or dry rot or bacteria. As used in this Limited Coverage, the term loss or damage means:
 - a. Direct physical loss or damage to Covered Property caused by "fungus", wet or dry rot or bacteria, including the cost of removal of the "fungus", wet or dry rot or bacteria;
 - b. The cost to tear out and replace any part of the building or other property as needed to gain access to the "fungus", wet or dry rot or bacteria; and
 - c. The cost of testing performed after removal, repair, replacement or restoration of the damaged property is completed, provided there is a reason to believe that "fungus", wet or dry rot or bacteria are present.
3. The coverage described under **E.2.** of this Limited Coverage is limited to \$15,000. Regardless of the number of claims, this limit is the most we will pay for the total of all loss or damage arising out of all occurrences of "specified causes of loss" (other than fire or lightning) and Flood which take place in a 12-month period (starting with the beginning of the present annual policy period). With respect to a particular occurrence of loss which results in "fungus", wet or dry rot or bacteria, we will not pay more than a total of \$15,000 even if the "fungus", wet or dry rot or bacteria continues to be present or active, or recurs, in a later policy period.
4. The coverage provided under this Limited Coverage does not increase the applicable Limit of Insurance on any Covered Property. If a particular occurrence results in loss or damage by "fungus", wet or dry rot or bacteria, and other loss or damage, we will not pay more, for the total of all loss or damage, than the applicable Limit of Insurance on the affected Covered Property.

If there is covered loss or damage to Covered Property, not caused by "fungus", wet or dry rot or bacteria, loss payment will not be limited by the terms of this Limited Coverage, except to the extent that "fungus", wet or dry rot or bacteria causes an increase in the loss. Any such increase in the loss will be subject to the terms of this Limited Coverage.

5. The terms of this Limited Coverage do not increase or reduce the coverage provided under Paragraph **F.2.** (Water Damage, Other Liquids, Powder Or Molten Material Damage) of this Causes Of Loss Form or under the Additional Coverage – Collapse.
6. The following, **6.a.** or **6.b.**, applies only if Business Income and/or Extra Expense coverage applies to the described premises and only if the "suspension" of "operations" satisfies all terms and conditions of the applicable Business Income and/or Extra Expense coverage form.
 - a. If the loss which resulted in "fungus", wet or dry rot or bacteria does not in itself necessitate a "suspension" of "operations", but such "suspension" is necessary due to loss or damage to property caused by "fungus", wet or dry rot or bacteria, then our payment under Business Income and/or Extra Expense is limited to the amount of loss and/or expense sustained in a period of not more than 30 days. The days need not be consecutive.
 - b. If a covered "suspension" of "operations" was caused by loss or damage other than "fungus", wet or dry rot or bacteria but remediation of "fungus", wet or dry rot or bacteria prolongs the "period of restoration", we will pay for loss and/or expense sustained during the delay (regardless of when such a delay occurs during the "period of restoration"), but such coverage is limited to 30 days. The days need not be consecutive.

F. Additional Coverage Extensions

1. Property In Transit

This Extension applies only to your personal property to which this form applies.

- a. You may extend the insurance provided by this Coverage Part to apply to your personal property (other than property in the care, custody or control of your salespersons) in transit more than 100 feet from the described premises. Property must be in or on a motor vehicle you own, lease or operate while between points in the coverage territory.

- b. Loss or damage must be caused by or result from one of the following causes of loss:
 - (1) Fire, lightning, explosion, windstorm or hail, riot or civil commotion, or vandalism.
 - (2) Vehicle collision, upset or overturn. Collision means accidental contact of your vehicle with another vehicle or object. It does not mean your vehicle's contact with the road bed.
 - (3) Theft of an entire bale, case or package by forced entry into a securely locked body or compartment of the vehicle. There must be visible marks of the forced entry.
- c. The most we will pay for loss or damage under this Extension is \$5,000.

This Coverage Extension is additional insurance. The Additional Condition, Coinsurance, does not apply to this Extension.

2. Water Damage, Other Liquids, Powder Or Molten Material Damage

If loss or damage caused by or resulting from covered water or other liquid, powder or molten material damage loss occurs, we will also pay the cost to tear out and replace any part of the building or structure to repair damage to the system or appliance from which the water or other substance escapes. This Coverage Extension does not increase the Limit of Insurance.

3. Glass

- a. We will pay for expenses incurred to put up temporary plates or board up openings if repair or replacement of damaged glass is delayed.
- b. We will pay for expenses incurred to remove or replace obstructions when repairing or replacing glass that is part of a building. This does not include removing or replacing window displays.

This Coverage Extension, **F.3.**, does not increase the Limit of Insurance.

G. Definitions

- 1. "Fungus" means any type or form of fungus, including mold or mildew, and any mycotoxins, spores, scents or by-products produced or released by fungi.
- 2. "Specified Causes of Loss" means the following: Fire; lightning; explosion; windstorm or hail; smoke; aircraft or vehicles; riot or civil commotion; vandalism; leakage from fire extinguishing equipment; sinkhole collapse; volcanic action; falling objects; weight of snow, ice or sleet; water damage.
 - a. Sinkhole collapse means the sudden sinking or collapse of land into underground empty spaces created by the action of water on limestone or dolomite. This cause of loss does not include:
 - (1) The cost of filling sinkholes; or
 - (2) Sinking or collapse of land into man-made underground cavities.
 - b. Falling objects does not include loss or damage to:
 - (1) Personal property in the open; or
 - (2) The interior of a building or structure, or property inside a building or structure, unless the roof or an outside wall of the building or structure is first damaged by a falling object.
 - c. Water damage means accidental discharge or leakage of water or steam as the direct result of the breaking apart or cracking of a plumbing, heating, air conditioning or other system or appliance (other than a sump system including its related equipment and parts), that is located on the described premises and contains water or steam.

Forming a part of

Policy Number: CBP 8526587	
Coverage Is Provided In THE NETHERLANDS INSURANCE COMPANY-A STOCK COMPANY	
Named Insured: ACADEMY OF DOVER	Agent: L & W INSURANCE Agent Code: 5290824 Agent Phone: (302)-674-3500

COMMERCIAL CRIME COVERAGE PART DECLARATIONS

COVERAGE

DESCRIPTION OF PREMISES

Prem. No.	Bldg. No.	Location Occupancy
001		104-106 SALISBURY ROAD DOVER DE 19904

TYPE OF COVERAGE

Coverage Form	Limit of Insurance	Deductible Amount
PLAN 1: FORM C		
THEFT, DISAPPEARANCE AND DESTRUCTION		
INSIDE THE PREMISES	\$ 50,000	\$ 2,500
OUTSIDE THE PREMISES	\$ 50,000	\$ 2,500
PLAN 1: FORM D		
ROBBERY AND SAFE BURGLARY COVERAGE - PROPERTY OTHER THAN MONEY AND SECURITIES		
INSIDE THE PREMISES		\$ 2,500
ROBBERY OF A CUSTODIAN	\$ 50,000	
SAFE BURGLARY	\$ 50,000	
OUTSIDE THE PREMISES	\$ 50,000	\$ 2,500
PLAN 1: FORM F	\$ 50,000	\$ 2,500
COMPUTER FRAUD COVERAGE		
PLAN 1: FORM R		
MONEY ORDERS/COUNTERFEIT PAPER CURRENC	\$ 50,000	\$ 2,500

COMMERCIAL CRIME COVERAGE PART DECLARATIONS (continued)

TYPE OF COVERAGE

Coverage Form	Limit of Insurance	Deductible Amount
PLAN 1: FORM B	\$ 150,000	\$ 2,500
FORGERY OR ALTERATIONS COVERAGE		
PLAN 1: FORM O - PER LOSS	\$ 50,000	\$ 2,500
PUBLIC EMPLOYEE DISHONESTY COVERAGE		
PLAN 0: FORM		
FUNDS TRANSFER FRAUD COVERAGE	\$ 50,000	\$ 2,500

FORMS AND ENDORSEMENTS:

Forms and Endorsements applying to this Coverage Part and made part of this policy:

Form Number	Description
18-24 - 0507	EXCLUSION OF TERRORISM
CC140 - 1090	QUICK REFERENCE-CRIME COVERAGE PART
CR0003 - 0186	FORGERY OR ALTERATIONS COVERAGE FORM
CR0004 - 1090	THEFT DISAPPEARANCE & DESTRUCTION COV. FORM
CR0005 - 1090	ROBBERY/SAFE BURGLARY-PROP O/T MONEY & SECURITIES
CR1000 - 0695	CRIME GENERAL PROVISIONS
IL0003 - 0907	CALCULATION OF PREMIUM

Includes copyrighted material of Insurance Services Office, Inc. with its permission. Copyright, Insurance Services Office, Inc. 1982, 1983, 1984, 1985.

Date Issued: 11/19/2020

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION OF TERRORISM

This endorsement modifies insurance provided under the following:

COMMERCIAL CRIME COVERAGE FORM

- A.** The following definition is added and applies under this endorsement wherever the term terrorism is enclosed in quotation marks.

“Terrorism” means activities against persons, organizations or property of any nature:

1. That involve the following or preparation for the following:
 - a. Use or threat of force or violence; or
 - b. Commission or threat of a dangerous act; or
 - c. Commission or threat of an act that interferes with or disrupts an electronic, communication, information, or mechanical system; and
2. When one or both of the following applies:
 - a. The effect is to intimidate or coerce a government or the civilian population or any segment thereof, or to disrupt any segment of the economy; or
 - b. It appears that the intent is to intimidate or coerce a government, or to further political, ideological, religious, social or economic objectives or to express (or express opposition to) a philosophy or ideology.

- B.** The following exclusion is added:

EXCLUSION OF TERRORISM

We will not pay for loss or damage caused directly or indirectly by “terrorism”, including action in hindering or defending against an actual or expected incident of “terrorism”. Such loss or damage is excluded regardless of any other cause or event that contributes concurrently or in any sequence to the loss. **But this exclusion applies only when one or more of the following are attributed to an incident of “terrorism”:**

1. The “terrorism” is carried out by means of the dispersal or application of radioactive material, or through the use of a nuclear weapon or device that involves or produces a nuclear reaction, nuclear radiation or radioactive contamination; or
2. Radioactive material is released, and it appears that one purpose of the “terrorism” was to release such material; or
3. The “terrorism” is carried out by means of the dispersal or application of pathogenic or poisonous biological or chemical materials; or
4. Pathogenic or poisonous biological or chemical materials are released, and it appears that one purpose of the “terrorism” was to release such materials; or
5. The total of insured damage to all types of property in the United States, its territories and possessions, Puerto Rico and Canada exceeds \$25,000,000. In determining whether the \$25,000,000 threshold is exceeded, we will include all insured damage sustained by property of all persons and entities affected by the “terrorism” and business interruption losses sustained by owners or occupants of the damaged property. For the purpose of this provision, insured damage means damage that is covered by any insurance plus damage that would be covered by any insurance but for the application of any terrorism exclusions. Multiple incidents of “terrorism” which occur within a 72-hour period and appear to be carried out in concert or to have a related purpose or common leadership will be deemed to be one incident, for the purpose of determining whether the threshold is exceeded.

With respect to this item **B.5.**, the immediately preceding paragraph describes the threshold used to measure the magnitude of an incident of “terrorism” and the circumstances in which the threshold will apply, for the purpose of determining whether this Exclusion will apply to that incident. When the Exclusion applies to an incident of “terrorism”, there is no coverage under this Coverage Form, Coverage Part or Policy.

C. Application Of Other Exclusions

1. When the Exclusion Of Terrorism applies in accordance with the terms of **B.1.** or **B.2.**, such exclusion applies without regard to the Nuclear Hazard Exclusion in this Coverage Form, Coverage Part or Policy.
2. The terms and limitations of any terrorism exclusion, or the inapplicability or omission of a terrorism exclusion, do not serve to create coverage for any loss or damage which would otherwise be excluded under this Coverage Form, Coverage Part or Policy, such as losses excluded by the Nuclear Hazard Exclusion or the War And Military Action Exclusion.

FORGERY OR ALTERATION COVERAGE FORM (Coverage Form B)

A. COVERAGE

We will pay for loss involving Covered Instruments resulting directly from the Covered Causes of Loss.

1. **Covered Instruments:** Checks, drafts, promissory notes, or similar written promises, orders or directions to pay a sum certain in "money" that are:
 - a. Made or drawn by or drawn upon you;
 - b. Made or drawn by one acting as your agent;or that are purported to have been so made or drawn.
2. **Covered Causes Of Loss:** Forgery or alteration of, on or in any Covered Instrument.
3. **Coverage Extension**

Legal Expenses: If you are sued for refusing to pay any Covered Instrument on the basis that it has been forged or altered, and you have our written consent to defend against the suit, we will pay for any reasonable legal expenses that you incur and pay in that defense. The amount we will pay under this extension is in addition to the Limit of Insurance applicable to this insurance.

B. LIMIT OF INSURANCE

The most we will pay for loss in any one "occurrence" is the applicable Limit of Insurance shown in the Declarations.

C. DEDUCTIBLE

We will not pay for loss in any one "occurrence" unless the amount of loss exceeds the Deductible Amount shown in the Declarations. We will then pay the amount of loss in excess of the Deductible Amount, up to the Limit of Insurance. This provision does not apply to legal expenses paid under the Coverage Extension.

D. ADDITIONAL EXCLUSION, CONDITIONS AND DEFINITION

In addition to the provisions in the Crime General Provisions Form, this Coverage Form is also subject to the following:

1. Additional Exclusions

Acts of Employees, Directors or Trustees: We will not pay for loss resulting from any dishonest or criminal act committed by any of your "employees," directors or trustees:

- a. Whether acting alone or in collusion with other persons;
or
- b. Whether while performing services for you or otherwise.

2. Additional Conditions

- a. **Facsimile Signatures:** We will treat mechanically reproduced facsimile signatures the same as handwritten signatures.
- b. **General Amendment:** As respects this Coverage Form, the words Covered Property in the Crime General Provisions Form mean Covered Instruments.
- c. **Proof of Loss:** You must include with your proof of loss any instrument involved in that loss, or, if that is not possible, an affidavit setting forth the amount and cause of loss.
- d. **Territory:** We will cover loss you sustain anywhere in the world.

The Territory General Condition does not apply to this Coverage Form.

3. Additional Definition

"Occurrence" means all loss caused by any person or in which that person is involved, whether the loss involves one or more instruments.

THEFT, DISAPPEARANCE AND DESTRUCTION COVERAGE FORM

A. COVERAGE—We will pay for loss of Covered Property resulting directly from the Covered Causes of Loss.

1. Section 1.—Inside The Premises

a. Covered Property: “Money” and “securities” inside the “premises” or a “banking premises.”

b. Covered Causes of Loss

- (1) “Theft”
- (2) Disappearance
- (3) Destruction

c. Coverage Extensions

(1) **Containers of Covered Property:** We will pay for loss of, and loss from damage to, a locked safe, vault, cash register, cash box or cash drawer located in the “premises” resulting directly from an actual or attempted:

- (a) “Theft” of; or
- (b) Unlawful entry into those containers.

(2) **Premises Damage:** We will pay for loss from damage to the “premises” or its exterior resulting directly from an actual or attempted “theft” of Covered Property if you are the owner of the “premises” or are liable for damage to it.

2. Section 2.—Outside the Premises

a. Covered Property: “Money” and “securities” outside the “premises” in the care and custody of a “messenger.”

b. Covered Causes of Loss

- (1) “Theft”
- (2) Disappearance
- (3) Destruction

c. Coverage Extension

Conveyance of Property By Armored Motor Vehicle Company: We will pay for loss of Covered Property resulting directly from the Covered Causes of Loss while outside the “premises” in the care and custody of an armored motor vehicle company.

But, we will pay only for the amount of loss that you cannot recover:

- (1) Under your contract with the armored motor vehicle company; and
- (2) From any insurance or indemnity carried by, or for the benefit of customers of, the armored motor vehicle company.

B. LIMIT OF INSURANCE

The most we will pay for loss in any one “occurrence” is the applicable Limit of Insurance shown in the DECLARATIONS.

C. DEDUCTIBLE

We will not pay for loss in any one “occurrence” unless the amount of loss exceeds the Deductible Amount shown in the DECLARATIONS. We will then pay the amount of loss in excess of the Deductible Amount, up to the Limit of Insurance. In the event more than one Deductible Amount could apply to the loss, only the highest Deductible Amount may be applied.

D. ADDITIONAL EXCLUSIONS, CONDITION AND DEFINITIONS: In addition to the provisions in the Crime General Provisions, this Coverage Form is subject to the following:

1. Additional Exclusions: We will not pay for loss as specified below:

a. Accounting or Arithmetical Errors or Omissions: Loss resulting from accounting or arithmetical errors or omissions.

- b. Acts of Employees, Directors, Trustees or Representatives:** Loss resulting from any dishonest or criminal act committed by any of your “employees,” directors, trustees or authorized representatives:
 - (1) Acting alone or in collusion with other persons; or
 - (2) While performing services for you or otherwise.
- c. Exchanges or Purchases:** Loss resulting from the giving or surrendering of property in any exchange or purchase.
- d. Fire:** Loss from damage to the “premises” resulting from fire, however caused.
- e. Money Operated Devices:** Loss of property contained in any money operated device unless the amount of “money” deposited in it is recorded by a continuous recording instrument in the device.
- f. Transfer or Surrender of Property**
 - (1) Loss of property after it has been transferred or surrendered to a person or place outside the “premises” or “banking premises”:
 - (a) On the basis of unauthorized instructions; or
 - (b) As a result of a threat to do:
 - i. Bodily harm to any person; or
 - ii. Damage to any property.
 - (2) But, this exclusion does not apply under COVERAGE, Section 2. to loss of Covered Property while outside the “premises” or “banking premises” in the care and custody of a “messenger” if you:
 - (a) Had no knowledge of any threat at the time the conveyance began; or
 - (b) Had knowledge of a threat at the time the conveyance began, but the loss was not related to the threat.
- g. Vandalism:** Loss from damage to the “premises” or its exterior or to containers of Covered Property by vandalism or malicious mischief.
- h. Voluntary Parting of Title to or Possession of Property:** Loss resulting from your, or anyone acting on your express or implied authority, being induced by any dishonest act to voluntarily part with title to or possession of any property.

2. Additional Condition

Duties in the Event of Loss: If you have reason to believe that any loss of, or loss from damage to, Covered Property involves a violation of law, you must notify the police.

3. Additional Definitions

- a. “Banking Premises”** means the interior of that portion of any building occupied by a banking institution or similar safe depository.
- b. “Messenger”** means you, any of your partners or any “employee” while having care and custody of the property outside the “premises.”
- c. “Occurrence”** means an:
 - (1) Act or series of related acts involving one or more persons; or
 - (2) Act or event, or a series of related acts or events not involving any person.
- d. “Premises”** means the interior of that portion of any building you occupy in conducting your business.
- e. “Theft”** means any act of stealing.

COVERAGE FORM D

ROBBERY AND SAFE BURGLARY COVERAGE FORM – PROPERTY OTHER THAN MONEY AND SECURITIES

A. COVERAGE – We will pay for loss of, and loss from damage to, Covered Property resulting directly from the Covered Causes of Loss.

1. Section 1. – Inside The Premises

a. Robbery Of A Custodian

(1) **Covered Property:** "Property other than money and securities" inside the "premises" in the care and custody of a "custodian."

(2) **Property Not Covered:** Motor vehicles, trailers, or semi-trailers or equipment and accessories attached to them.

(3) **Covered Cause of Loss:** Actual or attempted "robbery."

(4) **Coverage Extension**

Premises Damage: We will pay for loss from damage to the "premises" or its exterior resulting directly from the Covered Cause of Loss, if you are the owner of the "premises" or are liable for damage to it.

b. Safe Burglary

(1) **Covered Property:** "Property other than money and securities" inside the "premises" in a safe or vault.

(2) **Covered Cause of Loss:** Actual or attempted "safe burglary."

(3) **Coverage Extension**

Premises, Safe and Vault Damage: We will pay for loss from damage to:

(a) The "premises" or its exterior; or

(b) A locked safe or vault located inside the "premises;"

resulting directly from the Covered Cause of Loss, if you are the owner of the property or liable for damage to it.

2. Section 2. – Outside The Premises

a. Covered Property: "Property other than money and securities" outside the "premises" in the care and custody of a "messenger."

b. Property Not Covered: Motor vehicles, trailers or semi-trailers or equipment and accessories attached to them.

c. Covered Cause of Loss: Actual or attempted "robbery."

d. Coverage Extension

Conveyance Of Property By Armored Motor Vehicle Company: We will pay for loss of, and loss from damage to, Covered Property resulting directly from the Covered Cause of Loss while outside the "premises" in the care and custody of an armored motor vehicle company.

But, we will pay only for the amount of loss you cannot recover:

(1) Under your contract with the armored motor vehicle company; and

(2) From any insurance or indemnity carried by, or for the benefit of customers of, the armored motor vehicle company.

B. LIMIT OF INSURANCE

The most we will pay for loss in any one "occurrence" is the applicable Limit of Insurance shown in the DECLARATIONS.

C. DEDUCTIBLE

We will not pay for loss in any one "occurrence" unless the amount of loss exceeds the Deductible Amount shown in the DECLARATIONS. We will then pay the amount of loss in excess of the Deductible Amount up to the Limit of Insurance. In the event more than one Deductible Amount could apply to the loss, only the highest Deductible Amount may be applied.

D. ADDITIONAL EXCLUSIONS, CONDITIONS AND DEFINITIONS: In addition to the provisions in the Crime General Provisions, this Coverage Form is subject to the following:

1. Additional Exclusions: We will not pay for loss as specified below:

a. Acts of Employees, Directors, Trustees or Representatives: Loss resulting from any dishonest or criminal act committed by any of your "employees," directors, trustees or authorized representatives:

(1) Acting alone or in collusion with other persons; or

(2) While performing services for you or otherwise.

b. Fire: Loss resulting from fire, however caused, except loss from damage to a safe or vault.

c. Transfer or Surrender of Property

(1) Loss of, or loss from damage to, property after it has been transferred or surrendered to a person or place outside the "premises:"

(a) On the basis of unauthorized instructions; or

(b) As a result of a threat to do:

i. Bodily harm to any person; or

ii. Damage to any property.

(2) But, this exclusion does not apply under COVERAGE, Section 2. to loss of Covered Property while outside the "premises" in the care and custody of a "messenger" if you:

(a) Had no knowledge of any threat at the time the conveyance began; or

(b) Had knowledge of a threat at the time the conveyance began, but the loss was not related to the threat.

d. Vandalism: Loss from damage to any property by vandalism or malicious mischief.

2. Additional Conditions

a. Duties in the Event of Loss: If you have reason to believe that any loss of, or loss from damage to, Covered Property involves a violation of law, you must notify the police.

b. Special Limit of Insurance for Specified Property: We will only pay up to \$5,000 for any one "occurrence" of loss of, and loss from damage to:

(1) Precious metals, precious or semiprecious stones, pearls, furs, or completed or partially completed articles made of or containing such materials that constitute the principal value of such articles; or

(2) Manuscripts, drawings, or records of any kind or the cost of reconstructing them or reproducing any information contained in them.

3. Additional Definitions

a. "Custodian" means you, any of your partners or any "employee" while having care and custody of the property inside the "premises," excluding any person while acting as a "watchperson" or janitor.

b. "Messenger" means you, any of your partners or any "employee" while having care and custody of the property outside the "premises."

c. "Occurrence" means an:

(1) Act or series of related acts involving one or more persons; or

(2) Act or event, or a series of related acts or events not involving any person.

d. "Premises" means the interior of that portion of any building you occupy in conducting your business.

e. "Robbery" means the taking of property from the care and custody of a person by one who has:

(1) Caused or threatened to cause that person bodily harm; or

(2) Committed an obviously unlawful act witnessed by that person.

f. "Safe Burglary" means the taking of:

(1) Property from within a locked safe or vault by a person unlawfully entering the safe or vault as evidenced by marks of forcible entry upon its exterior; or

(2) A safe or vault from inside the "premises."

g. "Watchperson" means any person you retain specifically to have care and custody of property inside the "premises" and who has no other duties.

QUICK REFERENCE COMMERCIAL CRIME COVERAGE PART

READ YOUR POLICY CAREFULLY

The Commercial Crime Coverage Part in your policy consists of Declarations, one or more Coverage Forms, General Provisions, Common Policy Conditions and Endorsements, if applicable. Following is a Quick Reference indexing of the principal provisions contained in each of the components making up the Coverage Part, listed in sequential order, except for the provisions in the Declarations which may not be in the sequence shown.

DECLARATIONS

- Insured's Name and Mailing Address
- Policy Period
- Coverage, Limits of Insurance and Deductible
- Forms and Endorsements applying to the Coverage Part at time of issue
- Cancellation of Prior Insurance

COVERAGE FORM(S) (one or more apply)

COVERAGE

- Section 1.—Inside the Premises
 - Covered Property
 - Covered Cause(s) of Loss (if applicable)
 - Coverage Extension(s) (if applicable)
- Section 2.—Outside the Premises
 - Covered Property
 - Covered Cause(s) of Loss (If applicable)
 - Coverage Extension(s) (if applicable)

LIMIT OF INSURANCE

DEDUCTIBLE (if applicable)

ADDITIONAL EXCLUSION(S), CONDITION(S) and DEFINITION(S)

CRIME GENERAL PROVISIONS FORM (CR 10 00)

GENERAL EXCLUSIONS

- Acts Committed by You or Your Partners
- Governmental Action
- Indirect Loss
- Legal Expenses
- Nuclear
- War and Similar Actions

GENERAL CONDITIONS

- Consolidation — Merger
- Coverage Extensions
- Discovery Period for Loss
- Duties in the Event of Loss
- Joint Insured
- Legal Action Against Us
- Loss Covered Under More Than One Coverage of This Insurance
- Loss Sustained During Prior Insurance
- Loss Covered Under This Insurance and Prior Insurance Issued by Us or Any Affiliate
- Non-Cumulation of Limit of Insurance

Includes copyrighted material of Insurance Services Office, Inc., with its permission. Copyright, Insurance Services Office, Inc., 1984

GENERAL CONDITIONS (Cont'd)

Other Insurance
Ownership of Property; Interests Covered
Policy Period
Records
Recoveries
Territory
Transfer of Your Rights of Recovery Against Others To Us
Valuation-Settlement

GENERAL DEFINITIONS

"Employee"
"Money"
"Property Other Than Money and Securities"
"Securities"

SAFE DEPOSITORY GENERAL PROVISIONS FORM (CR 40 00)

GENERAL EXCLUSIONS

Acts Committed by You or Your Partners
Governmental Action
Nuclear
War and Similar Actions

GENERAL CONDITIONS

Joint Insured
Non-Cumulation of Limit Insurance
Other Insurance
Ownership of Customers' Property

GENERAL DEFINITIONS

"Money"
"Occurrence"
"Premises"
"Property Other Than Money and Securities"
"Securities"

COMMON POLICY CONDITIONS (IL 00 17)

Cancellation
Changes
Examination of Your Books and Records
Inspections and Surveys
Premiums
Transfer of Your Rights and Duties Under This Policy

ENDORSEMENTS (if applicable)

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

CRIME GENERAL PROVISIONS

Various provisions in this policy restrict coverage. Read the entire policy carefully to determine rights, duties and what is or is not covered.

Throughout this policy the words "you" and "your" refer to the Named Insured shown in the Declarations. The words "we", "us" and "our" refer to the Company providing this insurance.

Words and phrases in quotation marks are defined in the policy.

Unless stated otherwise in any Crime Coverage Form, Declarations or endorsement, the following General Exclusions, General Conditions and General Definitions apply to all Crime Coverage Forms forming part of this policy.

A. GENERAL EXCLUSIONS

We will not pay for loss as specified below:

- 1. Acts Committed by You or Your Partners:** Loss resulting from any dishonest or criminal act committed by you or any of your partners whether acting alone or in collusion with other persons.
- 2. Governmental Action:** Loss resulting from seizure or destruction of property by order of governmental authority.
- 3. Indirect Loss:** Loss that is an indirect result of any act or "occurrence" covered by this insurance including, but not limited to, loss resulting from:
 - a.** Your inability to realize income that you would have realized had there been no loss of, or loss from damage to, Covered Property.
 - b.** Payment of damages of any type for which you are legally liable. But, we will pay compensatory damages arising directly from a loss covered under this insurance.
 - c.** Payment of costs, fees or other expenses you incur in establishing either the existence or the amount of loss under this insurance.
- 4. Legal Expenses:** Expenses related to any legal action.
- 5. Nuclear:** Loss resulting from nuclear reaction, nuclear radiation or radioactive contamination, or any related act or incident.
- 6. War and Similar Actions:** Loss resulting from war, whether or not declared, warlike action, insurrection, rebellion or revolution, or any related act or incident.

B. GENERAL CONDITIONS

- 1. Concealment, Misrepresentation or Fraud:** This insurance is void in any case of fraud by you as it relates to this insurance at any time. It is also void if you or any other insured, at any time, intentionally conceal or misrepresent a material fact concerning:
 - a.** This insurance;
 - b.** The Covered Property;
 - c.** Your interest in the Covered Property; or
 - d.** A claim under this insurance.
- 2. Consolidation – Merger:** If through consolidation or merger with, or purchase of assets of, some other entity:
 - a.** Any additional persons become "employees"; or
 - b.** You acquire the use and control of any additional "premises";any insurance afforded for "employees" or "premises" also applies to those additional "employees" and "premises", but only if you:
 - a.** Give us written notice within 30 days thereafter; and
 - b.** Pay us an additional premium.
- 3. Coverage Extensions:** Unless stated otherwise in the Coverage Form, our liability under any Coverage Extension is part of, not in addition to, the Limit of Insurance applying to the Coverage or Coverage Section.
- 4. Discovery Period for Loss:** We will pay only for covered loss discovered no later than one year from the end of the policy period.
- 5. Duties in the Event of Loss:** After you discover a loss or a situation that may result in loss of, or loss from damage to, Covered Property you must:

- a. Notify us as soon as possible.
 - b. Submit to examination under oath at our request and give us a signed statement of your answers.
 - c. Give us a detailed, sworn proof of loss within 120 days.
 - d. Cooperate with us in the investigation and settlement of any claim.
- 6. Joint Insured:**
- a. If more than one Insured is named in the Declarations, the first named Insured will act for itself and for every other Insured for all purposes of this insurance. If the first named Insured ceases to be covered, then the next named Insured will become the first named Insured.
 - b. If any Insured or partner or officer of that Insured has knowledge of any information relevant to this insurance, that knowledge is considered knowledge of every Insured.
 - c. An "employee" of any Insured is considered to be an "employee" of every Insured.
 - d. If this insurance or any of its coverages is cancelled or terminated as to any Insured, loss sustained by that Insured is covered only if discovered no later than one year from the date of that cancellation or termination.
 - e. We will not pay more for loss sustained by more than one Insured than the amount we would pay if all the loss had been sustained by one Insured.
- 7. Legal Action Against Us:** You may not bring any legal action against us involving loss:
- a. Unless you have complied with all the terms of this insurance; and
 - b. Until 90 days after you have filed proof of loss with us; and
 - c. Unless brought within 2 years from the date you discover the loss.
- 8. Liberalization:** If we adopt any revision that would broaden the coverage under this insurance without additional premium within 45 days prior to or during the policy period, the broadened coverage will immediately apply to this insurance.
- 9. Loss Covered Under More Than One Coverage of This Insurance:** If two or more coverages of this insurance apply to the same loss, we will pay the lesser of:
- a. The actual amount of loss; or
 - b. The sum of the limits of insurance applicable to those coverages.
- 10. Loss Sustained During Prior Insurance**
- a. If you, or any predecessor in interest, sustained loss during the period of any prior insurance that you or the predecessor in interest could have recovered under that insurance except that the time within which to discover loss had expired, we will pay for it under this insurance, provided:
 - (1) This insurance became effective at the time of cancellation or termination of the prior insurance; and
 - (2) The loss would have been covered by this insurance had it been in effect when the acts or events causing the loss were committed or occurred.
 - b. The insurance under this Condition is part of, not in addition to, the Limits of Insurance applying to this insurance and is limited to the lesser of the amount recoverable under:
 - (1) This insurance as of its effective date; or
 - (2) The prior insurance had it remained in effect.
- 11. Loss Covered Under This Insurance and Prior Insurance Issued by Us or Any Affiliate:** If any loss is covered:
- a. Partly by this insurance; and
 - b. Partly by any prior cancelled or terminated insurance that we or any affiliate had issued to you or any predecessor in interest;
- the most we will pay is the larger of the amount recoverable under this insurance or the prior insurance.
- 12. Non-Cumulation of Limit of Insurance:** Regardless of the number of years this insurance remains in force or the number of premiums paid, no Limit of Insurance cumulates from year to year or period to period.
- 13. Other Insurance:** This insurance does not apply to loss recoverable or recovered under other insurance or indemnity. However, if the limit of the other insurance or indemnity is insufficient to cover the entire amount of the loss, this insurance will apply to that part of the loss, other than that falling within any deductible amount, not recoverable or recovered under the other insurance or indemnity. However, this insurance will not apply to the amount of loss that is more than the applicable Limit of Insurance shown in the Declarations.

- 14. Ownership of Property; Interests Covered:** The property covered under this insurance is limited to property:
- a. That you own or hold; or
 - b. For which you are legally liable.
- However, this insurance is for your benefit only. It provides no rights or benefits to any other person or organization.
- 15. Policy Period:**
- a. The Policy Period is shown in the Declarations.
 - b. Subject to the Loss Sustained During Prior Insurance condition, we will pay only for loss that you sustain through acts committed or events occurring during the Policy Period.
- 16. Records:** You must keep records of all Covered Property so we can verify the amount of any loss.
- 17. Recoveries:**
- a. Any recoveries, less the cost of obtaining them, made after settlement of loss covered by this insurance will be distributed as follows:
 - (1) To you, until you are reimbursed for any loss that you sustain that exceeds the Limit of Insurance and the Deductible Amount, if any;
 - (2) Then to us, until we are reimbursed for the settlement made;
 - (3) Then to you, until you are reimbursed for that part of the loss equal to the Deductible Amount, if any.
 - b. Recoveries do not include any recovery:
 - (1) From insurance, suretyship, reinsurance, security or indemnity taken for our benefit; or
 - (2) Of original "securities" after duplicates of them have been issued.
- 18. Territory:** This insurance covers only acts committed or events occurring within the United States of America, U. S. Virgin Islands, Puerto Rico, Canal Zone, or Canada.
- 19. Transfer of Your Rights of Recovery Against Others to Us:** You must transfer to us all your rights of recovery against any person or organization for any loss you sustained and for which we have paid or settled. You must also do everything necessary to secure those rights and do nothing after loss to impair them.
- 20. Valuation – Settlement:**
- a. Subject to the applicable Limit of Insurance provision we will pay for:
 - (1) Loss of "money" but only up to and including its face value. We may, at our option, pay for loss of "money" issued by any country other than the United States of America:
 - (a) At face value in the "money" issued by that country; or
 - (b) In the United States of America dollar equivalent determined by the rate of exchange on the day the loss was discovered.
 - (2) Loss of "securities" but only up to and including their value at the close of business on the day the loss was discovered. We may, at our option:
 - (a) Pay the value of such "securities" or replace them in kind, in which event you must assign to us all your rights, title and interest in and to those "securities"; or
 - (b) Pay the cost of any Lost Securities Bond required in connection with issuing duplicates of the "securities". However, we will be liable only for the payment of so much of the cost of the bond as would be charged for a bond having a penalty not exceeding the lesser of the:
 - (i) Value of the "securities" at the close of business on the day the loss was discovered; or
 - (ii) Limit of Insurance.
 - (3) Loss of, or loss from damage to, "property other than money and securities" or loss from damage to the "premises" for not more than the:
 - (a) Actual cash value of the property on the day the loss was discovered;
 - (b) Cost of repairing the property or "premises"; or
 - (c) Cost of replacing the property with property of like kind and quality.
 We may, at our option, pay the actual cash value of the property or repair or replace it.
 If we cannot agree with you upon the actual cash value or the cost of repair or replacement, the value or cost will be determined by arbitration.
 - b. We may, at our option, pay for loss of, or loss from damage to, property other than "money":
 - (1) In the "money" of the country in which the loss occurred; or

- (2) In the United States of America dollar equivalent of the "money" of the country in which the loss occurred determined by the rate of exchange on the day the loss was discovered.

c. Any property that we pay for or replace becomes our property.

C. GENERAL DEFINITIONS

1. "Employee" means:

a. Any natural person:

- (1) While in your service (and for 30 days after termination of service); and
- (2) Whom you compensate directly by salary, wages or commissions; and
- (3) Whom you have the right to direct and control while performing services for you; or

b. Any natural person employed by an employment contractor while that person is subject to your direction and control and performing services for you excluding, however, any such person while having care and custody of property outside the "premises".

But "employee" does not mean any:

- (1) Agent, broker, factor, commission merchant, consignee, independent contractor or representative of the same general character; or
- (2) Director or trustee except while performing acts coming within the scope of the usual duties of an employee.

2. "Money" means:

a. Currency, coins and bank notes in current use and having a face value; and

b. Travelers checks, register checks and money orders held for sale to the public.

3. "**Property Other Than Money and Securities**" means any tangible property other than "money" and "securities" that has intrinsic value but does not include any property listed in any Crime Coverage Form as Property Not Covered.

4. "**Securities**" means negotiable and non-negotiable instruments or contracts representing either "money" or other property and includes:

a. Tokens, tickets, revenue and other stamps (whether represented by actual stamps or unused value in a meter) in current use; and

b. Evidences of debt issued in connection with credit or charge cards, which cards are not issued by you; but does not include "money".

COMMERCIAL GENERAL LIABILITY COVERAGE PART DECLARATIONS (continued)

PREMIUM

Class Code	Classification Description		Rates		Advance Premium	
	Premium Base	Territory Code	Prods/ Comp Ops	All Other	Prods/ Comp Ops	All Other
75438	VIOLENT EVENT RESPONSE COVERAGE FOR SCHOOL					
	329	999				\$ 45
	TOTAL NUMBER OF STUDENTS					
79122	DATA SECURITY COVERAGE DATA RESPONSE & EXPENSES					
	329	000				\$ 593
	TOTAL NUMBER OF STUDENTS					
79123	DATA SECURITY COVERAGE DATA DEFENSE & LIABILITY					
	329	000				\$ 592
	TOTAL NUMBER OF STUDENTS					
79124	DATA SECURITY COVERAGE COMPUTER ATTACK/EXTORTION					
	329	000				\$ 1,372
	TOTAL NUMBER OF STUDENTS					
79124	DATA SECURITY COVERAGE NETWORK SECURITY					
	329	000				\$ 794
	TOTAL NUMBER OF STUDENTS					

NEW BUSINESS

Forming a part of

Policy Number: CBP 8526587	
Coverage Is Provided In THE NETHERLANDS INSURANCE COMPANY-A STOCK COMPANY	
Named Insured: ACADEMY OF DOVER	Agent: L & W INSURANCE
	Agent Code: 5290824 Agent Phone: (302)-674-3500

COMMERCIAL GENERAL LIABILITY COVERAGE PART DECLARATIONS (continued)

PREMIUM

Class Code	Classification Description		Rates		Advance Premium	
	Premium Base	Territory Code	Prods/Comp Ops	All Other	Prods/Comp Ops	All Other
92100	EMPLOYEE BENEFITS LIABILITY COVERAGE					
	40	000				\$ 440
	TOTAL EMPLOYEES					
92405	STOP GAP EMPLOYERS LIABILITY					
	1,700,000	001				\$ 247
	PAYROLL PER \$1000					
LOCATION 001						
47469	SCHOOLS-FACULTY LIABILITY FOR CORPORAL PUNISHMENT OF PUPILS PRODUCTS-COMPLETED OPERATIONS ARE SUBJECT TO THE GENERAL AGGREGATE LIMIT					
	40	001	INCL		\$ 5.867	INCL \$ 235
	EACH FACULTY MEM					

COMMERCIAL GENERAL LIABILITY COVERAGE PART DECLARATIONS (continued)

PREMIUM

Class Code	Classification Description		Rates		Advance Premium	
	Premium Base	Territory Code	Prods/Comp Ops	All Other	Prods/Comp Ops	All Other
47471	SCHOOLS - PUBLIC - ELEMENTARY, KINDERGARTEN OR JUNIOR HIGH PRODUCTS-COMPLETED OPERATIONS ARE SUBJECT TO THE GENERAL AGGREGATE LIMIT					
	329	001	INCL	\$ 3.292	INCL	\$ 1,083
	EACH STUDENT					

Audit Period: Total Advance Premium **INCLUDED**

FORMS AND ENDORSEMENTS

Forms and Endorsements applying to this Coverage Part and made part of this policy:

Form Number	Description
IL0017	- 1198 COMMON POLICY CONDITIONS
17-20	- 0718 SCHOOL AMENDATORY ENDORSEMENT
17-22	- 1202 EXCLUSION - LEAD
17-517	- 0517 PUBLIC ENTITY IMMUNITY AND TORT CAP PRESERVATION
17-98	- 1202 EXCLUSION - ASBESTOS
22-112	- 0107 NON-CUMULATION OF LIABILITY (SAME OCCURRENCE)
22-115	- 0207 VIOLENT EVENT RESPONSE COVERAGE FOR SCHOOLS
22-162	- 0510 STOP GAP-EMPLOYERS LIABILITY COVERAGE ENDORSEMENT
22-164	- 0910 RECORDING AND DISTRIBUTION OF MATERIAL OR INFORMATION
22-175	- 0913 EXCLUSION-TRAMPOLINES
22-176	- 1012 EXCLUSION-CLIMBING OR RAPPELLING WALLS
22-31	- 0799 SEXUAL MISCONDUCT AND MOLESTATION LIABILITY EXCLUSION
22-75	- 1000 VIRGINIA CHANGES-NEWLY ACQUIRED/FORMED ORGANIZATIONS
22-90	- 0204 EXCLUSION - SILICA
CG0001	- 1001 COMMERCIAL GENERAL LIABILITY COVERAGE FORM
CG0062	- 1202 WAR LIABILITY EXCLUSION
CG0435	- 0202 EMPLOYEE BENEFITS LIABILITY COVERAGE
CG2147	- 0798 EMPLOYMENT RELATED PRACTICES EXCLUSION
CG2167	- 0402 FUNGI OR BACTERIAL EXCLUSION

22-19 (12/02)

INSURED COPY

NEW BUSINESS

Forming a part of

Policy Number: CBP 8526587	
Coverage Is Provided In THE NETHERLANDS INSURANCE COMPANY-A STOCK COMPANY	
Named Insured: ACADEMY OF DOVER	Agent: L & W INSURANCE
	Agent Code: 5290824 Agent Phone: (302)-674-3500

COMMERCIAL GENERAL LIABILITY COVERAGE PART DECLARATIONS (continued)

FORMS AND ENDORSEMENTS

Forms and Endorsements applying to this Coverage Part and made part of this policy:

Form Number	Description
CG2170	- 0115 CAP ON LOSSES FROM CERTIFIED ACTS OF TERRORISM
CG2176	- 0115 EXCLUSION OF PUNITIVE DAMAGES
CG2267	- 1093 CORPORAL PUNISHMENT
CL175	- 0286 QUICK REFERENCE COMML GENERAL LIABILITY COVERAGE PART
17-59	- 0694 DECLARATIONS EXTENSION

Includes copyrighted material of Insurance Services Office, Inc. with its permission. Copyright, Insurance Services Office, Inc. 1982,1983, 1984, 1985, 2000.

Date Issued: 11/19/2020

Forming a part of

Policy Number: CBP 8526587	
Coverage Is Provided In THE NETHERLANDS INSURANCE COMPANY-A STOCK COMPANY	
Named Insured: ACADEMY OF DOVER	Agent: L & W INSURANCE Agent Code: 5290824 Agent Phone: (302)-674-3500

SEXUAL MISCONDUCT AND MOLESTATION LIABILITY COVERAGE PART DECLARATIONS

LIMITS OF INSURANCE

Each Loss Limit	\$ 1,000,000
Aggregate Limit	\$ 1,000,000
Innocent Party Aggregate Defense Expense Amount	\$ 300,000

PREMIUM

Class Code	Classification Description	Premium Base	Advance Premium
DE			
73558	SEXUAL MISCONDUCT AND MOLESTATION LIABILITY	329	INCLUDED
		TOTAL STUDENT ENROLLMENT	
73700	INNOCENT PARTY DEFENSE COVERAGE	329	INCLUDED
		TOTAL STUDENT ENROLLMENT	
Audit Period:		Total Advance Premium	\$ 3,000

FORMS AND ENDORSEMENTS

Forms and Endorsements applying to this Coverage Part and made part of this policy:

Form Number	Description
17-172 - 0598	INNOCENT PARTY DEFENSE COVERAGE
17-517 - 0517	PUBLIC ENTITY IMMUNITY AND TORT CAP PRESERVATION
17-78 - 0399	SEXUAL MISCONDUCT & MOLESTATION LIAB COVERAGE FORM
17-82 - 0595	QUICK REFERENCE SEXUAL MISCONDUCT & MOLESTATION LIAB

22-34 (05/95)

INSURED COPY

Policy Number: CBP 8526587

Coverage Is Provided In THE NETHERLANDS INSURANCE COMPANY-A STOCK COMPANY

Named Insured:
ACADEMY OF DOVERAgent:
L & W INSURANCE

Agent Code: 5290824

Agent Phone: (302)-674-3500

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**SCHOOL AMENDATORY ENDORSEMENT**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULEParagraph 2. of provision L. **Medical Payments Limitation – Students** applies only when a Student Medical Expense Limit is shown below:**Student Medical Expense Limit: NONE Each Student****A. Professional Services Liability**

1. The following is added to Paragraph 1. **Insuring Agreement** under **Section I – Coverage A – Bodily Injury And Property Damage Liability**:

“Bodily injury” arising out of the rendering of or failure to render “covered professional services” to others by an “employee” shall be deemed to be caused by an “occurrence” but only if such acts or omissions are committed within the scope of his or her employment by you.

With respect to **Section III – Limits Of Insurance**, Paragraph 5., any act or omission together with all related acts or omissions in the furnishing of these services to any one person will be considered one “occurrence”.

2. With respect to the Professional Services Liability insurance provided by this provision, the following exclusion is added to Paragraph 2., **Exclusions** under **Section I – Coverage A – Bodily Injury And Property Damage Liability**:

Professional Services Liability

“Bodily injury” arising out of any act or omission that:

- (1) Is in fact criminal, fraudulent, malicious or deliberately dishonest; or
- (2) Occurs prior to the inception date of this coverage:
 - (a) Of which the insured had knowledge before the inception date of this coverage and reasonably could have expected a claim might result; or
 - (b) For which other valid and collectible insurance is available to the insured.

3. Except with respect to the ownership or operation of an infirmary with facilities for lodging and treatment or a public clinic or hospital, Paragraph **2.a.(1)(d)** under **Section II – Who Is An Insured** does not apply to the rendering of or failure to render “covered professional services” by an “employee” within the scope of his or her employment by you.
4. For the purposes of coverage afforded under this endorsement, the following is added to **Section V – Definitions**:

“Covered professional services” means professional services, treatment, advice or instruction provided by nurses, psychologists, mental health counselors, psychometric counselors, occupational or physical therapists, hearing and speech therapists, athletic trainers, emergency medical technicians or paramedics.
5. The insurance afforded under this provision is excess over any of the other professional liability insurance whether primary, excess, contingent or on any other basis.

B. Medical Malpractice Limitation

With respect to the ownership or operation of an infirmary with facilities for lodging and treatment or a public clinic or hospital, this insurance does not apply to “bodily injury”, “property damage” or “personal and advertising injury” caused by:

1. The rendering of or failure to render:
 - a. Medical, surgical, dental, x-ray, or nursing service, treatment, advice or instruction, or the related furnishing of food or beverages;
 - b. Any health or therapeutic service, treatment, advice or instruction; or
 - c. Any service, treatment, advice or instruction for the purpose of appearance or skin enhancement, hair removal or replacement or personal grooming.
2. The furnishing or dispensing of or failure to furnish or dispense drugs or medical, dental or surgical supplies or appliances; or
3. The handling or treatment of dead bodies, including autopsies, organ donation or other procedures.

Nursing service, treatment, advice or instruction and health or therapeutic service, treatment, advice or instruction include but are not limited to the rendering of or failure to render “covered professional services” as defined in Paragraph **A.4.** of this endorsement.

C. School Broadcasting And Publication – Personal And Advertising Injury Liability Extension

1. Exclusion **j.(1)** under Paragraph **2.**, **Exclusions of Section I – Coverage B – Personal And Advertising Injury Liability**, does not apply within the scope of your activities as a school.
2. The following is added to **Section IV – Commercial General Liability Conditions**:

Retraction Or Correction Of Erroneous Matter

Retraction or correction shall be promptly made of any matter which has been published or broadcasted through error or mistake, or which is untrue.

3. Paragraph 1. under **Section V – Definitions** is replaced by:

1. “Advertisement” means an announcement that is broadcast or published in the print, broadcast or electronic media to the general public or specific market segments about goods, products or services for the purpose of attracting customers or supporters. For the purposes of this definition:
 - a. Announcements that are published include material placed on the Internet or on similar electronic means of communication, but only with respect to your goods, products or services for the purpose of attracting customers or supporters; and
 - b. Regarding web sites, only that part of a web site that is about your goods, products or services for the purposes of attracting customers or supporters is considered an advertisement.

D. Expected Or Intended Injury Extension

Exclusion a. **Expected Or Intended Injury** under Paragraph 2., **Exclusions of Section I – Coverage A – Bodily Injury And Property Damage Liability** is replaced by the following:

a. Expected Or Intended Injury

“Bodily injury” or “property damage” expected or intended from the standpoint of the insured. This exclusion does not apply to “bodily injury” or “property damage” resulting from the use of reasonable force to protect persons or property.

E. Pollution Exclusion – Exception For Classroom Instruction Activities

1. The following is added to provision **(1)(a)** of Exclusion f., **Pollution** under Paragraph 2., **Exclusions of Section I – Coverage A – Bodily Injury And Property Damage Liability**:

However, this exclusion does not apply to “bodily injury” or “property damage” that is caused, in whole or in part, by activities usual to classroom instruction on premises you own or rent.

2. When the Total Pollution Exclusion endorsement CG 21 55 or CG 21 65 is made a part of this Policy, Paragraph 1. above does not apply and the following is added to provision **(1)** of Exclusion f. **Pollution** under Paragraph 2., **Exclusions of Section I – Coverage A – Bodily Injury And Property Damage Liability** as amended by either endorsement CG 21 55 or CG 21 65:

However, this exclusion does not apply to “bodily injury” or “property damage” that is caused, in whole or in part, by activities usual to classroom instruction on premises you own or rent.

F. Non-Owned Aircraft

Except with respect to the transportation of students, Exclusion g., **Aircraft, Auto Or Watercraft** under Paragraph 2., **Exclusions of Section I – Coverage A – Bodily Injury And Property Damage Liability** does not apply to an aircraft that an insured does not own, provided:

1. It is hired or chartered by or loaned to an insured with a trained, paid crew;
2. The pilot in command holds a currently effective certificate, issued by the duly constituted authority of the United States of America or Canada, designating him or her a commercial or airline pilot; and
3. It is not being used to carry persons or property for a charge.

However, the insurance afforded by this provision does not apply if there is available to the insured other valid and collectible insurance, whether primary, excess (other than insurance written to apply specifically in excess of this Policy), contingent or on any other basis, that would also apply to the loss covered under this provision.

G. Unmanned Aircraft

1. Exclusion **g., Aircraft, Auto Or Watercraft** under Paragraph **2., Exclusions** of **Section I – Coverage A – Bodily Injury And Property Damage Liability** is amended by adding the following:

This exclusion does not apply to unmanned aircraft operations if the:

- (1) Unmanned aircraft weighs less than 55 pounds and has a maximum airspeed of less than 100 miles per hour.
 - (2) Operations comply with all Federal Aviation Administration Regulations and Requirements pertaining to unmanned aircraft; and
 - (3) Operations are included within the insured's operations as a school.
2. The following exclusion is added to Paragraph **2., Exclusions** under **Section I – Coverage B – Personal And Advertising Injury Liability**:

This insurance does not apply to "personal and advertising injury" arising out of unmanned aircraft operations included within the insured's operations as a school.

H. Non-Owned Watercraft

Except with respect to the transportation of students, Exclusion **g.(2), Aircraft, Auto Or Watercraft** under **Section I – Coverage A – Bodily Injury And Property Damage Liability** is replaced by the following:

- (2) A watercraft you do not own that is not being used to carry persons or property for a charge;

The insurance afforded under this provision is excess over any of the other insurance whether primary, excess, contingent or on any other basis.

I. Transportation Of Students Limitation

With respect to the transportation of students, Exclusion **g., Aircraft, Auto Or Watercraft** of **Section I – Coverage A – Bodily Injury And Property Damage Liability** is replaced by the following:

g. Aircraft, Auto Or Watercraft

"Bodily injury" or "property damage" arising out of the ownership, maintenance, operation, use, "loading or unloading" or entrustment to others of any aircraft, "auto" or watercraft that is owned, operated or hired by any insured. For the purpose of this exclusion the word hired includes any contract to furnish transportation of your students to and from schools.

This exclusion applies even if the claims against the insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage" involved the ownership, maintenance, use or entrustment to others of any aircraft, "auto" or watercraft that is owned or operated by or rented or loaned to any insured.

J. Personal Property Of Others – Care, Custody Or Control Extension

1. We will pay those sums that the insured becomes legally obligated to pay as damages because of “property damage” to personal property of others while in the insured’s care, custody or control. This insurance applies only to “property damage” arising out of the insured’s operations as a school.
2. Except with respect to “property damage” resulting from the use of elevators, Exclusion **j.(4)**, under Paragraph **2.**, **Exclusions of Section I – Coverage A – Bodily Injury And Property Damage Liability**, does not apply to the coverage provided by this provision.
3. Subject to **4.** below, the most we will pay for “property damage” to personal property of others while in the insured’s care, custody or control arising from any one “occurrence” is \$100,000. This amount is subject to the Each Occurrence Limit described in Paragraph **5.** of **Section III – Limits Of Insurance.**
4. The most we will pay for the sum of all “property damage” to personal property of others while in the insured’s care, custody or control in an annual policy period is \$100,000. This amount is subject to the General Aggregate Limit described in Paragraph **2.** of **Section III – Limits Of Insurance.**
5. We will not pay for “property damage”, under this provision, until the amount of “property damage” exceeds \$250.

K. Medical Payments Extension

If **Coverage C – Medical Payments** is not otherwise excluded from this Coverage Part:

1. Paragraph **7.** of **Section III – Limits Of Insurance** is replaced by the following:
 7. Subject to **5.** above, the Medical Expense Limit is the most we will pay under Coverage **C** for all medical expenses because of “bodily injury” sustained by any one person other than your student. The Medical Expense Limit is the greater of:
 - a. \$15,000; or
 - b. The Medical Expense Limit shown in the Declarations.
2. The second subparagraph **(2)** of Paragraph **1.a. Insuring Agreement** under **Coverage C – Medical Payments** is replaced by the following:

(2) The expenses are incurred and reported to us within three years of the date of the accident; and

L. Medical Payments Limitation – Students

1. If **Coverage C – Medical Payments** is not otherwise excluded from this Coverage Part, the following is added to Paragraph **2.**, **Exclusions** under **Section I – Coverage C – Medical Payments:**

We will not pay expenses for “bodily injury” to your students.
2. When a Student Medical Expense Limit is shown in the Schedule of this endorsement, Paragraph **1.** of this provision does not apply and the following is added to **Section III – Limits Of Insurance:**

Subject to **5.** above, the Student Medical Expense Limit is the most we will pay under Coverage **C** for all medical expenses because of “bodily injury” sustained by any one of your students.

M. Increased Cost Of Bail Bonds And Loss Of Earnings – Extension Of Supplementary Payments – Coverages A And B

Supplementary Payments – Coverages A And B is amended as follows:

1. Paragraph **1.b.** is replaced by the following:
 - b. Up to \$5,000 for cost of bail bonds required because of accidents or traffic law violations arising out of the use of any vehicle to which Bodily Injury Liability Coverage applies. We do not have to furnish these bonds.
2. Paragraph **1.d.** is replaced by the following:
 - d. All reasonable expenses incurred by the insured at our request to assist us in the investigation or defense of the claim or "suit", including actual loss of earnings up to \$500 a day because of time off from work.

N. Criminal Acts Defense Expense Coverage

1. The following is added to **Supplementary Payments – Coverages A And B:**

Subject to a Criminal Acts Defense Expense Coverage Aggregate Amount of \$50,000 and at your request, we will reimburse the insured for "defense expenses" incurred in the defense of a criminal action or criminal proceeding brought against the insured and commencing during the policy period but only if:

- a. The criminal action or criminal proceeding arose from acts committed within the scope of employment by you or while performing duties related to the conduct of your business; and
- b. The insured is acquitted or the charges are dropped; and
- c. The "defense expenses" are reported to us within one year of the acquittal or dropped charges.

We have no duty to defend the insured. The insured must select an attorney of his or her choice for representation in the criminal action or criminal proceeding. Our obligation to reimburse "defense expenses" ends when the Criminal Acts Defense Expense Coverage Aggregate Amount has been used up in the reimbursement of "defense expenses".

2. The coverage provided under Paragraph **1.** of this provision does not apply to "defense expenses" incurred for:
 - a. Appeals after a guilty verdict is rendered at the first trial;
 - b. Any retrial upon an entry of a mistrial after verdict; or
 - c. Any retrial after appeal.
3. Regardless of the number of insureds, criminal actions or criminal proceedings, the Criminal Acts Defense Expense Coverage Aggregate Amount is the most we will reimburse all insureds under Paragraph **1.** of this provision for the sum of all "defense expenses". If the policy period is for more than one year, the Criminal Acts Defense Expense Coverage Aggregate Amount applies separately to each consecutive annual period, and to any remaining period of less than 12 months starting with the beginning of the policy period. But if the policy period is extended after issuance for less than 12 months, the additional period will be deemed part of the last preceding period for the purposes of determining the Criminal Acts Defense Expense Coverage Aggregate Amount.
4. As used in this provision, "defense expenses" means those reasonable and necessary expenses that result from the defense of a specific criminal action or criminal proceeding brought against the insured, including:
 - a. Attorney and paralegal fees and expenses; and
 - b. Costs of legal proceedings"Defense expenses" does not include loss of earnings or any fines or penalties imposed by law.
5. The insurance provided by this provision does not apply if there is available to the insured:
 - a. Any other valid and collectible insurance, whether primary, excess (other than insurance written to apply specifically in excess of this Policy), contingent or on any other basis; or
 - b. Any other provision of this Policythat would also apply to the expenses covered under this provision.

O. Extension Of Who Is An Insured

1. Paragraph 2. of **Section II – Who Is An Insured** is amended to include as an insured:

- a. Any of the following but only with respect to their duties in connection with the positions described below:
 - (1) Any of your trustees or members of your Board of Governors if you are a private charitable or educational institution;
 - (2) Any of your board members or commissioners if you are a public board or commission; or
 - (3) Any student teachers teaching as part of their educational requirements.
- b. Any club or organization, if they have been specifically authorized by you, and only with respect to their use of your premises and their activities elsewhere that are within the scope of the authorized purpose of such organization. Clubs or organizations include, but are not limited to:
 - (1) Parent support groups or booster clubs;
 - (2) Student groups; or
 - (3) Alumni groups.

A club's or organization's directors, officers or members are also insureds, while acting within the scope of their duties for such club or organization.

- c. Any affiliated subsidiary, organization, board, commission, foundation or endowment that you own or control more than 50% of such entity.

The insurance provided by this provision does not apply if there is available to the insured any other valid and collectible insurance, whether primary, excess (other than insurance written to apply specifically in excess of this Policy), contingent or on any other basis that would apply to the insurance provided under this provision.

- d. Any of your students who are members of a safety patrol which you have organized or operate, but only for "bodily injury" or "property damage" that occurs while performing duties related to the conduct of such safety patrol. This includes the parents or legal guardian of such student, but only with respect to his or her liability as a parent or guardian because of "bodily injury" or "property damage" arising out of the operation of such safety patrol.

The insurance provided by this provision is excess over any of the other insurance available to the insured, whether primary, excess, contingent or on any other basis.

2. Definitions 5. and 19. under **Section V – Definitions**, are replaced by the following:

- 5. "Employee" includes a "leased worker" or a substitute teacher. "Employee" does not include a "temporary worker".
- 19. "Temporary worker" means a person who is furnished to you to substitute for a permanent "employee" on leave or to meet seasonal or short-term workload conditions. "Temporary worker" does not include a substitute teacher.

P. Coverages A and B Extension – Co-Employees And Volunteer Workers

Except with respect to "bodily injury" or "personal and advertising injury" to a person arising out of employment-related practices, **Section II – Who Is An Insured** is modified as follows:

1. Paragraph **2.a.(1)(a)** is replaced by the following:
 2. **a. (1)** “Bodily injury” or “personal and advertising injury”:
 - (a) To you, to your partners or members (if you are a partnership or joint venture), or to your members (if you are a limited liability company);
2. Paragraphs **2.a.(1)(b)** and **3.a.** are deleted.

Employment-related practices means refusal to employ that person, termination of that person’s employment, or practices, policies, acts or omissions related to employment, such as coercion, demotion, evaluation, reassignment, discipline, defamation, harassment, humiliation, or discrimination directed at that person.

Q. Newly Acquired Or Formed Organizations

Paragraph **4.a.** of **Section II – Who Is An Insured** is replaced by the following:

- a. Coverage under this provision is afforded only until the expiration of the policy period in which the entity was acquired or formed by you;

R. Additional Insureds – By Contract, Agreement Or Permit

1. Paragraph **2.** under **Section II – Who Is An Insured** is amended to include as an insured any person or organization when you and such person or organization have agreed in writing in a contract, agreement or permit that such person or organization be added as an additional insured on your Policy to provide insurance such as is afforded under this Coverage Part. Such person or organization is an additional insured only with respect to liability for “bodily injury”, “property damage” or “personal and advertising injury” caused, in whole or part, by:
 - a. Your ongoing operations performed for that person or organization;
 - b. Premises or facilities owned or used by you; or
 - c. Your maintenance, operation or use of equipment rented or leased to you by such person or organization.

With respect to Paragraph **1.a.** above, a person’s or organization’s status as an insured under this provision ends when your operations for that person or organization are completed.

With respect to Paragraph **1.b.** above, a person’s or organization’s status as an insured under this provision ends when their contract or agreement with you for such premises or facilities ends.

However:

- a. The insurance afforded to such additional insured only applies to the extent permitted by law; and
 - b. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.
2. This provision does not apply:
 - a. Unless the written contract or agreement has been executed, or permit has been issued, prior to the “bodily injury”, “property damage” or “personal and advertising injury”;

- b. To “bodily injury” or “property damage” occurring after:
 - (1) All work, including materials, parts or equipment furnished in connection with such work, in the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the site of the covered operations has been completed; or
 - (2) That portion of “your work” out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as part of the same project;
- c. To the rendering of or failure to render any professional services including, but not limited to, any professional architectural, engineering or surveying services such as:
 - (1) The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; and
 - (2) Supervisory, inspection, architectural or engineering activities;
- d. To “bodily injury”, “property damage” or “personal and advertising injury” arising out of any act, error or omissions that results from the additional insured’s sole negligence or wrongdoing;
- e. To any lessor of equipment after the equipment lease expires, or
- f. To any person or organization included as an insured by a separate additional insured endorsement issued by us and made a part of this Policy.

3. With respect to the insurance afforded to these additional insureds, the following is added to **Section III – Limits Of Insurance**:

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

- a. Required by the contract or agreement; or
 - b. Available under the applicable Limits of Insurance shown in the Declarations;
- whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

S. Additional Insured – Vendors

- 1. Paragraph 2. of **Section II – Who Is An Insured** is amended to include as an additional insured any person(s) or organization(s) that distribute or sell “your products” in the regular course of their business, hereafter referred to as vendors, to whom you are obligated by a written agreement to procure additional insured coverage under your Policy, but only with respect to “bodily injury” or “property damage” arising out of “your products” which are distributed or sold in the regular course of the vendor’s business.

2. Exclusions

With respect to the insurance provided by this provision, the following additional exclusions apply:

- a. This insurance does not apply to:
 - (1) “Bodily injury” or “property damage” for which the vendor is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that the vendor would have in the absence of the contract or agreement;

- (2) Any express warranty unauthorized by you;
- (3) Any physical or chemical change in the product made intentionally by the vendor;
- (4) Repackaging, except when unpacked solely for the purpose of inspection, demonstration, testing, or the substitution of parts under instructions from the manufacturer, and then repackaged in the original container;
- (5) Any failure to make such inspections, adjustments, tests or servicing as the vendor has agreed to make or normally undertakes to make in the usual course of business, in connection with the distribution or sale of the products;
- (6) Demonstration, installation, servicing or repair operations, except such operations performed at the vendor's premises in connection with the sale of the product;
- (7) Products which, after distribution or sale by you, have been labeled or relabeled or used as a container, part or ingredient of any other thing or substance by or for the vendor; or
- (8) "Bodily injury" or "property damage" arising out of the sole negligence of the vendor for its own acts or omissions or those of its employees or anyone else acting on its behalf. However, this exclusion does not apply to:

- (a) The exceptions contained in Paragraphs (4) or (6); or

- (b) Such inspections, adjustments, tests or servicing as the vendor has agreed to make or normally undertakes to make in the usual course of business, in connection with the distribution or sale of the products.

- b. This insurance does not apply to any insured person or organization, from which you have acquired such products, or any ingredient, part or container, entering into, accompanying or containing such products.

3. The insurance afforded to any person or organization as an insured under this provision:

- a. Applies only to coverage and minimum limits of insurance required by the written agreement, but in no event exceeds either the scope of coverage or the Limits of Insurance provided by this Policy;
- b. Does not apply to any person or organization for any "bodily injury" or "property damage" if any other additional insured endorsement attached to this Policy applies to that person or organization with regard to the "bodily injury" or "property damage";
- c. Applies only if the "bodily injury" or "property damage" occurs subsequent to the execution of the written agreement; and
- d. Applies only if the written agreement is in effect at the time the "bodily injury" or "property damage" occurs.

T. Primary And Noncontributory Additional Insured Extension

This provision applies to any person or organization who qualifies as an additional insured under any form or endorsement under this Policy.

The following is added to Condition 4., **Other Insurance** under **Section IV – Commercial General Liability Conditions**:

Primary And Noncontributory Insurance

This insurance is primary to and will not seek contribution from any other insurance available to an additional insured under your Policy provided that:

- (1) The additional insured is a Named Insured under such other insurance; and
- (2) You have agreed in writing in a contract or agreement that this insurance would be primary and would not seek contribution from any other insurance available to the additional insured. Regardless of the written agreement between you and an additional insured, this insurance is excess over any other insurance whether primary, excess, contingent or on any other basis for which the additional insured has been added as an additional insured on other policies.

U. Property Damage Liability – Elevators

1. Paragraphs (3), (4), and (6) under Exclusion j., **Damage To Property of Section I – Coverage A – Bodily Injury And Property Damage Liability**, do not apply if such “property damage” results from the use of elevators.
2. The insurance afforded by this provision is excess over any of the other insurance, whether primary, excess, contingent or on any other basis, that is property insurance.

V. Damage By Fire, Lightning, Explosion, Smoke Or Leakage

If Damage To Premises Rented To You is not otherwise excluded from this Coverage Part:

1. Under Paragraph 2. **Exclusions of Section I – Coverage A – Bodily Injury And Property Damage Liability**:
 - a. The fourth from the last Paragraph of Exclusion j., **Damage To Property** is replaced by the following:

Paragraphs (1), (3), and (4) of this exclusion do not apply to “property damage” (other than damage by fire, lightning, explosion, smoke or leakage from automatic fire protection systems) to premises, including the contents of such premises, rented to you for a period of seven or fewer consecutive days. A separate limit of insurance applies to Damage To Premises Rented To You as described in **Section III – Limits Of Insurance**.
 - b. The last Paragraph is replaced by the following:

Exclusions c. through n. do not apply to damage by fire, lightning, explosion, smoke or leakage from automatic fire protection systems to premises while rented to you or temporarily occupied by you with permission of the owner. A separate Limit of Insurance applies to Damage To Premises Rented To You as described in **Section III – Limits Of Insurance**.
2. Paragraph 6. under **Section III – Limits Of Insurance**, is replaced by the following:
 6. Subject to Paragraph 5. above, the Damage To Premises Rented To You Limit is the most we will pay under Coverage A for damages because of “property damage” to any one premises, while rented to you, or in the case of damage by fire, lightning, explosion, smoke or leakage from automatic fire protection systems, while rented to you or temporarily occupied by you with permission of the owner. This limit is the greater of:
 - a. \$500,000; or
 - b. The amount shown in the Declarations for Damage To Premises Rented To You Limit.

3. The word “fire” is replaced with “fire, lightning, explosion, smoke or leakage from automatic fire protection systems” where it appears in:
 - a. **Section IV – Commercial General Liability Conditions**, Condition 4., **Other Insurance**, Paragraph b. **Excess Insurance**, Paragraph (1)(b); and
 - b. **Section V – Definitions**, Paragraph 9.a.

W. Location(s) General Aggregate Limit

1. For all sums which the insured becomes legally obligated to pay as damages caused by “occurrences” under **Section I – Coverage A – Bodily Injury And Property Damage Liability**, and for all medical expenses caused by accidents under **Section I – Coverage C – Medical Payments**, which can be attributed only to operations at a single “location”:
 - a. A separate Location General Aggregate Limit applies to each “location”, and that limit is equal to the amount of the General Aggregate Limit shown in the Declarations.
 - b. The Location General Aggregate Limit is the most we will pay for the sum of all damages under **Section I – Coverage A – Bodily Injury And Property Damage Liability**, except damages because of “bodily injury” or “property damage” included in the “products-completed operations hazard”, and for medical expenses under **Section I – Coverage C – Medical Payments** regardless of the number of:
 - (1) Insureds;
 - (2) Claims made or “suits” brought; or
 - (3) Persons or organizations making claims or bringing “suits”.
 - c. Any payments made under **Section I – Coverage A – Bodily Injury And Property Damage Liability** for damages or under **Section I – Coverage C – Medical Payments** for medical expenses shall reduce the Location General Aggregate Limit for that “location”. Such payments shall not reduce the General Aggregate Limit shown in the Declarations nor shall they reduce any other Location General Aggregate Limit for any other “location”.
 - d. The limits shown in the Declarations for Each Occurrence, Damage To Premises Rented To You, and Medical Expense continue to apply. However, instead of being subject to the General Aggregate Limit shown in the Declarations, such limits will be subject to the applicable Location General Aggregate Limit.
2. For all sums which the insured becomes legally obligated to pay as damages caused by “occurrences” under **Section I – Coverage A – Bodily Injury And Property Damage Liability**, and for all medical expenses caused by accidents under **Section I – Coverage C – Medical Payments**, which cannot be attributed only to operations at a single “location”:
 - a. Any payments made under **Coverage A – Bodily Injury And Property Damage Liability** for damages or under **Coverage C – Medical Payments** for medical expenses shall reduce the amount available under the General Aggregate Limit or the Products-Completed Operations Aggregate Limit whichever is applicable; and
 - b. Such payments shall not reduce any Location General Aggregate Limit.
3. When coverage for liability arising out of the “products-completed operations hazard” is provided, any payments for damages because of “bodily injury” or “property damage” included in the “products-completed operations hazard” will reduce the Products-Completed Operations Aggregate Limit, and not reduce the General Aggregate Limit nor the Location General Aggregate Limit.
4. For the purposes of this provision, the following is added to **Section V – Definitions**:
 “Location” means premises involving the same or connecting lots, or premises whose connection is interrupted only by a street, roadway, waterway or right-of-way of a railroad.
5. The provisions of **Section III – Limits Of Insurance** not otherwise modified by this provision shall continue to apply as stipulated.

X. Waiver Of Transfer Of Rights Of Recovery Against Others To Us – When Required In A Written Contract Or Agreement With You

The following Paragraph is added to Condition **8.**, **Transfer Of Rights Of Recovery Against Others To Us** under **Section IV – Commercial General Liability Conditions**:

We waive any right of recovery we may have against a person or organization because of payments we make for injury or damage arising out of your ongoing operations or “your work” done under a contract with that person or organization and included in the “products-completed operations hazard” provided:

- a. You and that person or organization have agreed in writing in a contract or agreement that you waive such rights against that person or organization; and
- b. The injury or damage occurs subsequent to the execution of the written contract or written agreement.

Y. Knowledge Of Occurrence, Offense, Claim Or Suit

Except with respect to Professional Liability Paragraph **2.(2)(a)** in Section **A.**, **Professional Services Liability** of this endorsement, the following is added to Condition **2.**, **Duties In The Event Of Occurrence, Offense, Claim Or Suit** under **Section IV – Commercial General Liability Conditions**:

Knowledge of an “occurrence”, offense, claim or “suit” by an agent, servant or “employee” of any insured shall not in itself constitute knowledge of the insured unless your school superintendent, business manager or a person who has been designated by them to receive reports of “occurrences”, offenses, claims and “suits” shall have received such notice from the agent, servant or “employee”.

Z. Failure To Disclose Hazards And Prior Occurrences

The following is added to Condition **6.**, **Representations** under **Section IV – Commercial General Liability Conditions**:

Your failure to disclose all hazards or prior “occurrences” existing as of the inception date of the Policy shall not prejudice the coverage afforded by this Policy provided such failure to disclose all hazards or prior “occurrences” is not intentional.

AA. Liberalization Clause

If we revise this School Amendatory Endorsement to provide more coverage without additional premium charge, your Policy will automatically provide the coverage as of the day the revision is effective in your state.

BB. Bodily Injury Redefined

The definition of “bodily injury” in Paragraph **3.** of **Section V – Definitions** is replaced by the following:

3. “Bodily injury” means physical injury, sickness or disease sustained by a person. This includes mental anguish, mental injury, shock, fright or death that results from such physical injury, sickness or disease.

Policy Number: CBP 8526587	
Coverage Is Provided In THE NETHERLANDS INSURANCE COMPANY-A STOCK COMPANY	
Named Insured: ACADEMY OF DOVER	Agent: L & W INSURANCE
	Agent Code: 5290824 Agent Phone: (302)-674-3500

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EMPLOYEE BENEFITS LIABILITY COVERAGE

**THIS ENDORSEMENT PROVIDES CLAIMS-MADE COVERAGE.
PLEASE READ THE ENTIRE ENDORSEMENT CAREFULLY.**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Coverage	Limit Of Insurance		Deductible		Premium
Employee Benefits Programs	\$ 1,000,000	each employee	\$ 1,000	each employee	\$INCUDED
	\$ 3,000,000	aggregate			
Retroactive Date:	12/18/2002				

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

A. The following is added to Section I – Coverages:

COVERAGE – EMPLOYEE BENEFITS LIABILITY

1. Insuring Agreement

a. We will pay those sums that the insured becomes legally obligated to pay as damages because of any act, error or omission, of the insured, or of any other person for whose acts the insured is legally liable, to which this insurance applies. We will have the right and duty to defend the insured against any "suit" seeking those damages. However, we will have no duty to defend the insured against any "suit" seeking damages to which this insurance does not apply. We may, at our discretion, investigate any report of an act, error or omission and settle any "claim" or "suit" that may result. But:

- (1) The amount we will pay for damages is limited as described in Paragraph E. (Section III – Limits Of Insurance); and
- (2) Our right and duty to defend ends when we have used up the applicable limit of insurance in the payment of judgments or settlements.

No other obligation or liability to pay sums or perform acts or services is covered unless explicitly provided for under Supplementary Payments.

- b. This insurance applies to damages only if:
 - (1) The act, error or omission, is negligently committed in the "administration" of your "employee benefit program";
 - (2) The act, error or omission, did not take place before the Retroactive Date, if any, shown in the Schedule nor after the end of the policy period; and
 - (3) A "claim" for damages, because of an act, error or omission, is first made against any insured, in accordance with Paragraph c. below, during the policy period or an Extended Reporting Period we provide under Paragraph G. of this endorsement.
- c. A "claim" seeking damages will be deemed to have been made at the earlier of the following times:
 - (1) When notice of such "claim" is received and recorded by any insured or by us, whichever comes first; or
 - (2) When we make settlement in accordance with Paragraph 1.a. above.

A "claim" received and recorded by the insured within 60 days after the end of the policy period will be considered to have been received within the policy period, if no subsequent policy is available to cover the claim.
- d. All "claims" for damages made by an "employee" because of any act, error or omission, or a series of related acts, errors or omissions, including damages claimed by such "employee's" dependents and beneficiaries, will be deemed to have been made at the time the first of those "claims" is made against any insured.

2. Exclusions

This insurance does not apply to:

a. Dishonest, Fraudulent, Criminal Or Malicious Act

Damages arising out of any intentional, dishonest, fraudulent, criminal or malicious act, error or omission, committed by any insured, including the willful or reckless violation of any statute.

b. Bodily Injury, Property Damage, Or Personal And Advertising Injury

"Bodily injury", "property damage" or "personal and advertising injury".

c. Failure To Perform A Contract

Damages arising out of failure of performance of contract by any insurer.

d. Insufficiency Of Funds

Damages arising out of an insufficiency of funds to meet any obligations under any plan included in the "employee benefit program".

e. Inadequacy Of Performance Of Investment/Advice Given With Respect To Participation

Any "claim" based upon:

- (1) Failure of any investment to perform;
- (2) Errors in providing information on past performance of investment vehicles; or
- (3) Advice given to any person with respect to that person's decision to participate or not to participate in any plan included in the "employee benefit program".

f. Workers' Compensation And Similar Laws

Any "claim" arising out of your failure to comply with the mandatory provisions of any workers' compensation, unemployment compensation insurance, social security or disability benefits law or any similar law.

g. ERISA

Damages for which any insured is liable because of liability imposed on a fiduciary by the Employee Retirement Income Security Act of 1974, as now or hereafter amended, or by any similar federal, state or local laws.

h. Available Benefits

Any "claim" for benefits to the extent that such benefits are available, with reasonable effort and cooperation of the insured, from the applicable funds accrued or other collectible insurance.

i. Taxes, Fines Or Penalties

Taxes, fines or penalties, including those imposed under the Internal Revenue Code or any similar state or local law.

j. Employment-Related Practices

Damages arising out of wrongful termination of employment, discrimination, or other employment-related practices.

B. For the purposes of the coverage provided by this endorsement:

1. All references to Supplementary Payments – Coverages **A** and **B** are replaced by Supplementary Payments – Coverages **A, B** and **Employee Benefits Liability**.
2. Paragraphs **1.b.** and **2.** of the Supplementary Payments provision do not apply.

C. For the purposes of the coverage provided by this endorsement, Paragraphs 2. and 4. of Section II – Who Is An Insured are replaced by the following:

2. Each of the following is also an insured:

- a. Each of your "employees" who is or was authorized to administer your "employee benefit program".
 - b. Any persons, organizations or "employees" having proper temporary authorization to administer your "employee benefit program" if you die, but only until your legal representative is appointed.
 - c. Your legal representative if you die, but only with respect to duties as such. That representative will have all your rights and duties under this Endorsement.
- 4. Any organization you newly acquire or form, other than a partnership, joint venture or limited liability company, and over which you maintain ownership or majority interest, will qualify as a Named Insured if no other similar insurance applies to that organization. However:**
- a. Coverage under this provision is afforded only until the 90th day after you acquire or form the organization or the end of the policy period, whichever is earlier.
 - b. Coverage under this provision does not apply to any act, error or omission that was committed before you acquired or formed the organization.

D. For the purposes of the coverage provided by this endorsement, Paragraph 3. of Section II – Who Is An Insured does not apply.

E. For the purposes of the coverage provided by this endorsement, Section III – Limits Of Insurance is replaced by the following:

1. Limits Of Insurance

- a. The Limits of Insurance shown in the Schedule and the rules below fix the most we will pay regardless of the number of:

- (1) Insureds;
- (2) "Claims" made or "suits" brought;
- (3) Persons or organizations making "claims" or bringing "suits";
- (4) Acts, errors or omissions; or
- (5) Benefits included in your "employee benefit program".

- b. The Aggregate Limit is the most we will pay for all damages because of acts, errors or omissions negligently committed in the "administration" of your "employee benefit program".

- c. Subject to the Aggregate Limit, the Each Employee Limit is the most we will pay for all damages sustained by any one "employee", including damages sustained by such "employee's" dependents and beneficiaries, as a result of:

- (1) An act, error or omission; or
- (2) A series of related acts, errors or omissions

negligently committed in the "administration" of your "employee benefit program".

However, the amount paid under this endorsement shall not exceed, and will be subject to, the limits and restrictions that apply to the payment of benefits in any plan included in the "employee benefit program".

The Limits of Insurance of this endorsement apply separately to each consecutive annual period and to any remaining period of less than 12 months, starting with the beginning of the policy period shown in the Declarations of the policy to which this endorsement is attached, unless the policy period is extended after issuance for an additional period of less than 12 months. In that case, the additional period will be deemed part of the last preceding period for purposes of determining the Limits Of Insurance.

2. Deductible

- a. Our obligation to pay damages on behalf of the insured applies only to the amount of damages in excess of the deductible amount stated in the Schedule as applicable to Each Employee. The limits of insurance shall not be reduced by the amount of this deductible.
- b. The deductible amount stated in the Schedule applies to all damages sustained by any one "employee", including such "employee's" dependents and beneficiaries, because of all acts, errors or omissions to which this insurance applies.
- c. The terms of this insurance, including those with respect to:
 - (1) Our right and duty to defend any "suits" seeking those damages; and
 - (2) Your duties, and the duties of any other involved insured, in the event of an act, error or omission, or "claim"apply irrespective of the application of the deductible amount.
- d. We may pay any part or all of the deductible amount to effect settlement of any "claim" or "suit" and, upon notification of the action taken, you shall promptly reimburse us for such part of the deductible amount as we have paid.

F. For the purposes of the coverage provided by this endorsement, Conditions 2. and 4. of **Section IV – Conditions** are replaced by the following:

2. Duties In The Event Of An Act, Error Or Omission, Or "Claim" Or "Suit"

- a. You must see to it that we are notified as soon as practicable of an act, error or omission which may result in a "claim". To the extent possible, notice should include:
 - (1) What the act, error or omission was and when it occurred; and
 - (2) The names and addresses of anyone who may suffer damages as a result of the act, error or omission.
- b. If a "claim" is made or "suit" is brought against any insured, you must:
 - (1) Immediately record the specifics of the "claim" or "suit" and the date received; and
 - (2) Notify us as soon as practicable.You must see to it that we receive written notice of the "claim" or "suit" as soon as practicable.
- c. You and any other involved insured must:
 - (1) Immediately send us copies of any demands, notices, summonses or legal papers received in connection with the "claim" or "suit";
 - (2) Authorize us to obtain records and other information;
 - (3) Cooperate with us in the investigation or settlement of the "claim" or defense against the "suit"; and
 - (4) Assist us, upon our request, in the enforcement of any right against any person or organization which may be liable to the insured because of an act, error or omission to which this insurance may also apply.
- d. No insured will, except at that insured's own cost, voluntarily make a payment, assume any obligation or incur any expense without our consent.

4. Other Insurance

If other valid and collectible insurance is available to the insured for a loss we cover under this endorsement, our obligations are limited as follows:

a. Primary Insurance

This insurance is primary except when **b.** below applies. If this insurance is primary, our obligations are not affected unless any of the other insurance is also primary. Then, we will share with all that other insurance by the method described in **c.** below.

b. Excess Insurance

- (1) This insurance is excess over any of the other insurance, whether primary, excess, contingent or on any other basis that is effective prior to the beginning of the policy period shown in the Schedule of this insurance and that applies to an act, error or omission on other than a claims-made basis, if:
 - (a) No Retroactive Date is shown in the Schedule of this insurance; or
 - (b) The other insurance has a policy period which continues after the Retroactive Date shown in the Schedule of this insurance.
- (2) When this insurance is excess, we will have no duty to defend the insured against any "suit" if any other insurer has a duty to defend the insured against that "suit". If no other insurer defends, we will undertake to do so, but we will be entitled to the insured's rights against all those other insurers.
- (3) When this insurance is excess over other insurance, we will pay only our share of the amount of the loss, if any, that exceeds the sum of the total amount that all such other insurance would pay for the loss in absence of this insurance; and the total of all deductible and self-insured amounts under all that other insurance.
- (4) We will share the remaining loss, if any, with any other insurance that is not described in this Excess Insurance provision and was not bought specifically to apply in excess of the Limits of Insurance shown in the Schedule of this endorsement.

c. Method Of Sharing

If all of the other insurance permits contribution by equal shares, we will follow this method also. Under this approach each insurer contributes equal amounts until it has paid its applicable limit of insurance or none of the loss remains, whichever comes first.

If any of the other insurance does not permit contribution by equal shares, we will contribute by limits. Under this method, each insurer's share is based on the ratio of its applicable limits of insurance of all insurers.

- G.** For the purposes of the coverage provided by this endorsement, the following Extended Reporting Period provisions are added, or, if this endorsement is attached to a claims-made Coverage Part, replaces any similar Section in that Coverage Part:

EXTENDED REPORTING PERIOD

1. You will have the right to purchase an Extended Reporting Period, as described below, if:
 - a. This endorsement is canceled or not renewed; or
 - b. We renew or replace this endorsement with insurance that:
 - (1) Has a Retroactive Date later than the date shown in the Schedule of this endorsement; or
 - (2) Does not apply to an act, error or omission on a claims-made basis.
2. The Extended Reporting Period does not extend the policy period or change the scope of coverage provided. It applies only to "claims" for acts, errors or omissions that were first committed before the end of the policy period but not before the Retroactive Date, if any, shown in the Schedule. Once in effect, the Extended Reporting Period may not be canceled.
3. An Extended Reporting Period of five years is available, but only by an endorsement and for an extra charge.

You must give us a written request for the endorsement within 60 days after the end of the policy period. The Extended Reporting Period will not go into effect unless you pay the additional premium promptly when due.

We will determine the additional premium in accordance with our rules and rates. In doing so, we may take into account the following:

- a. The "employee benefit programs" insured;
- b. Previous types and amounts of insurance;
- c. Limits of insurance available under this endorsement for future payment of damages; and
- d. Other related factors.

The additional premium will not exceed 100% of the annual premium for this endorsement.

The Extended Reporting Period endorsement applicable to this coverage shall set forth the terms, not inconsistent with this Section, applicable to the Extended Reporting Period, including a provision to the effect that the insurance afforded for "claims" first received during such period is excess over any other valid and collectible insurance available under policies in force after the Extended Reporting Period starts.

4. If the Extended Reporting Period is in effect, we will provide an extended reporting period aggregate limit of insurance described below, but only for claims first received and recorded during the Extended Reporting Period.

The extended reporting period aggregate limit of insurance will be equal to the dollar amount shown in the Schedule of this endorsement under Limits of Insurance.

Paragraph **E.1.b.** of this endorsement will be amended accordingly. The Each Employee Limit shown in the Schedule will then continue to apply as set forth in Paragraph **E.1.c.**

- H. For the purposes of the coverage provided by this endorsement, the following definitions are added to the **Definitions** Section:

1. "Administration" means:

- a. Providing information to "employees", including their dependents and beneficiaries, with respect to eligibility for or scope of "employee benefit programs";
- b. Handling records in connection with the "employee benefit program"; or
- c. Effecting, continuing or terminating any "employee's" participation in any benefit included in the "employee benefit program".

However, "administration" does not include handling payroll deductions.

2. "Cafeteria plans" means plans authorized by applicable law to allow employees to elect to pay for certain benefits with pre-tax dollars.

3. "Claim" means any demand, or "suit", made by an "employee" or an "employee's" dependents and beneficiaries, for damages as the result of an act, error or omission.

4. "Employee benefit program" means a program providing some or all of the following benefits to "employees", whether provided through a "cafeteria plan" or otherwise:

- a. Group life insurance; group accident or health insurance; dental, vision and hearing plans; and flexible spending accounts; provided that no one other than an "employee" may subscribe to such benefits and such benefits are made generally available to those "employees" who satisfy the plan's eligibility requirements;
- b. Profit sharing plans, employee savings plans, employee stock ownership plans, pension plans and stock subscription plans, provided that no one other than an "employee" may subscribe to such benefits and such benefits are made generally available to all "employees" who are eligible under the plan for such benefits;
- c. Unemployment insurance, social security benefits, workers' compensation and disability benefits;
- d. Vacation plans, including buy and sell programs; leave of absence programs, including military, maternity, family, and civil leave; tuition assistance plans; transportation and health club subsidies; and
- e. Any other similar benefits designated in the Schedule or added thereto by endorsement.

- I. For the purposes of the coverage provided by this endorsement, Definitions **5.** and **18.** in the **Definitions** Section are replaced by the following:

5. "Employee" means a person actively employed, formerly employed, on leave of absence or disabled, or retired. "Employee" includes a "leased worker". "Employee" does not include a "temporary worker".

18. "Suit" means a civil proceeding in which damages because of an act, error or omission to which this insurance applies are alleged. "Suit" includes:

- a. An arbitration proceeding in which such damages are claimed and to which the insured must submit or does submit with our consent; or
- b. Any other alternative dispute resolution proceeding in which such damages are claimed and to which the insured submits with our consent.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION – LEAD LIABILITY

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART
OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE PART
RAILROAD PROTECTIVE LIABILITY COVERAGE PART
COMMERCIAL PROTECTOR[®] LIABILITY COVERAGE FORM

This insurance does not apply to:

1. “Bodily injury”, “property damage” or “personal and advertising injury” arising, in whole or in part, either directly or indirectly out of the mining, processing, manufacture, storage, distribution, sale, installation, removal, disposal, handling, inhalation, ingestion, absorption, use or existence of, exposure to, or contact with lead or lead contained in goods, products or materials; or
2. Any loss, cost or expense arising out of any:
 - a. Request, demand, order or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of lead or lead contained in goods, products or materials; or
 - b. Claim or suit by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of lead or lead contained in goods, products or materials.

SEXUAL MISCONDUCT OR MOLESTATION LIABILITY COVERAGE FORM

Various provisions in this form restrict coverage. Read the entire form carefully to determine rights, duties and what is and what is not covered.

Throughout this form the word "you" and "your" refer to the Named Insured shown in the Declarations. The words "we", "us" and "our" refer to the Company providing this insurance.

The word "insured" means any person or organization qualifying as such under SECTION II – WHO IS AN INSURED.

Other words and phrases that appear in quotation marks have special meaning. Refer to SECTION V – DEFINITIONS.

SECTION I – COVERAGE

A. Insuring Agreement

1. We will pay those sums that the insured becomes legally obligated to pay because of "loss" arising out of:
 - a. A "wrongful act" to which this insurance applies but only to the extent of the insured's "vicarious liability"; or
 - b. The insured's:
 - (1) Negligent:
 - (a) Employment;
 - (b) Investigation;
 - (c) Supervision;
 - (d) Retention;
 - (e) Training;
 - (f) Reporting to proper authorities, or failure to report to proper authorities, of a person who committed a "wrongful act"; or
 - (2) Negligent act, or failure to act, upon receipt of a complaint arising out of a "wrongful act"; but only if the "wrongful act" to which this insurance applies is committed without the knowledge, consent, direction or participation of the insured.
2. This insurance applies only if the "loss" arises from a "wrongful act" that is committed in the "coverage territory" and during the "policy period".
3. The amount we will pay for "loss" is limited as described in LIMITS OF INSURANCE (SECTION III).
4. No other obligation or liability to pay sums or perform acts or services is covered unless explicitly provided for under paragraph **I.B.** Defense and Defense Expense.

B. Defense and Defense Expense

1. We will have the right and duty to defend the insured against any "suit" seeking "loss" to which this insurance applies. We may, at our discretion, investigate any "wrongful act" and settle any claim or "suit" that may result. But:
 - a. When the Each Loss Limit or Aggregate Limit has been used up in the payment of "loss", our duty to defend the insured ends with respect to any "suit" seeking "loss" subject to such exhausted limit; and
 - b. We will have no duty to defend the insured against any "suit" seeking "loss" to which this insurance does not apply.

Includes copyrighted material of Insurance Services Office, Inc. with its permission
Copyright, Insurance Services Office, Inc., 1997

2. We will pay with respect to any claim we settle, or any "suit" against the insured we defend:
 - a. All expenses we incur.
 - b. The cost of appeal bonds and bonds to release attachments, but only for bond amounts within the applicable limit of insurance. We do not have to furnish these bonds.
 - c. All reasonable expenses incurred by the insured at our request to assist us in the investigation or defense of the claim or "suit", including actual loss of earnings up to \$250 per day because of time off from work.
 - d. All costs taxed against the insured in the "suit."
 - e. All interest on the full amount of any judgment that accrues after entry of the judgment and before we have paid, offered to pay, or deposited in court the part of the judgment that is within the applicable limit of insurance.

These payments will not reduce the limits of insurance.

C. Exclusions

This insurance does not apply:

1. Contractual Liability

To any "loss" for which the insured is obligated to pay by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability the insured would have in the absence of such contract or agreement.

2. Workers Compensation and Similar Laws

To any obligation of the insured under a workers compensation, disability benefits or unemployment compensation law or any similar law.

3. Employers Liability

To claims made or "suits" brought by:

- a. An "employee" of the insured for "loss" arising out of and in the course of:
 - (1) Employment by the insured; or
 - (2) Performing duties related to the conduct of the insured's business; or
- b. The spouse, child, parent, brother or sister of that "employee" as a consequence of paragraph a. above.

This exclusion applies:

1. Whether the insured may be liable as an employer or in any other capacity; and
2. To any obligation to share damages with or repay someone else who must pay damages because of a claim or "suit" described in paragraph a. or b. above.

4. Violation of Penal or Criminal Statute

To the cost of defense of, or payment of fines or penalties for any person who actually or allegedly violated any penal or criminal statute.

5. Punitive Damages And Other Noncompensatory Damages

To punitive or exemplary damages, multiplied portion of multiple damages, or fines or penalties imposed by law.

6. Late Notification Of An Incident

If you fail to give us written notice within 90 days of your being notified of an incident which could reasonably be expected to result in a claim or "suit" involving a "wrongful act".

SECTION II – WHO IS AN INSURED

A. If you are designated in the Declarations as:

1. An individual, you and your spouse are insureds, but only with respect to the conduct of a business of which you are the sole owner.
2. A partnership or joint venture, you are an insured. Your members, your partners, and their spouses are also insureds, but only with respect to the conduct of your business.
3. An organization other than a partnership or joint venture, you are an insured. Your stockholders are also insureds but only with respect to their liability as stockholders.

B. Each of the following is also an insured:

1. Your "executive officers" and directors are insureds, but only with respect to their duties as your "executive officers" and directors.
2. Any of your trustees or members of your Board of Governors, if you are an educational institution, but only with respect to their duties as such.
3. Any of your board members or commissioners, if you are a public board or commission, but only with respect to their duties as such.
4. Any:
 - a. Trustee, official or member of the Board of Governors, or
 - b. Members of the clergy,if you are a church, but only with respect to their duties as such.
5. Any of your "employees", other than your "executive officers", but only for acts within the scope of their employment by you or while performing duties related to the conduct of your business. However, no "employee" is an insured for claims made or "suits" brought :
 - a. By you, your partners or members (if you are a partnership or joint venture), or by a co-"employee" for "loss" arising out of and in the course of his or her employment or performing duties related to the conduct of your business;
 - b. By the spouse, child, parent, brother or sister of that co-"employee" as a consequence of paragraph a. above; or
 - c. For which there is any obligation to share damages with or repay someone else who must pay damages because of a claim or "suit" described in paragraph a. or b. above.
6. With respect to the liability of insureds described above, the heirs, administrators, assigns, and legal representatives of each insured in the event of death, incapacity, or bankruptcy.
7. Any of your student teachers teaching as part of their educational requirements but only within the scope of their duties for you.
8. Any of your "volunteer workers", but only while acting at your direction and within the scope of their duties for you.
9. Any of your church members, if you are a church, but only with respect to their liability for your activities or activities they perform on your behalf.

C. Any organization you newly acquire or form, other than a partnership or joint venture, and over which you maintain ownership or majority interest, will qualify as a Named Insured if there is no other similar insurance available to that organization. However:

- a. Coverage under this provision is afforded only until the 90th day after you acquire or form the organization or the end of the policy period, whichever is earlier;
- b. Coverage does not apply to "wrongful acts" that occurred before you acquired or formed the organization.

Includes copyrighted material of Insurance Services Office, Inc. with its permission
Copyright, Insurance Services Office, Inc., 1997

- D. No person or organization is an insured with respect to the conduct of any current or past partnership or joint venture that is not shown as a Named Insured in the Declarations.

SECTION III – LIMITS OF INSURANCE

- A. The Limits of Insurance shown in the Schedule and the rules below fix the most we will pay regardless of the number of:

1. Insureds;
2. Claims made or "suits" brought; or
3. Persons making claims or bringing "suits".

B. Aggregate Limit

The Aggregate Limit is the most we will pay for all "loss" arising from all "wrongful acts" to which this insurance applies.

C. Each Loss Limit

Subject to B. above, the Each Loss Limit is the most we will pay for the sum of all "loss" arising out of any "one wrongful act" to which this insurance applies.

- D. If the "policy period" of this Coverage Part is in effect for a period of more than one year, the Aggregate Limit applies separately to each consecutive annual period, and to any remaining period of less than 12 months, starting with the beginning of the "policy period". But if the "policy period" is extended after issuance for less than 12 months, the additional period will be deemed part of the last preceding period for the purposes of determining the Aggregate Limit.

SECTION IV – SEXUAL MISCONDUCT AND MOLESTATION LIABILITY CONDITIONS

We have no duty to provide insurance under this Coverage Part unless you and any other involved insured have fully complied with Conditions contained in the Coverage Part.

A. Bankruptcy

Bankruptcy or insolvency of the insured or of the insured's estate will not relieve us of our obligations under this Coverage Part.

B. Duties In The Event Of Wrongful Act, Claim Or Suit

(See Also Exclusion 6.)

1. You must see to it that we are notified, in writing and within 90 days of any notice to you, of an incident or a "wrongful act" which could reasonably be expected to result in a claim or "suit". To the extent possible, notice should include:
 - a. How, when and where the incident or "wrongful act" took place;
 - b. The names and addresses of any involved person(s) and witnesses; and
 - c. The nature of the harm resulting from the "wrongful act".
2. If a claim is made or "suit" is brought against any insured, you must:
 - a. Immediately record the specifics of the claim or "suit" and the date received; and
 - b. Notify us promptly.

You must see to it that we receive written notice of the claim or "suit" as soon as practicable.

3. You and any other involved insured must:
 - a. Immediately send us copies of any demands, notices, summonses or legal papers received in connection with the claim or "suit";

- b. Authorize us to obtain records and other information;
 - c. Cooperate with us in the investigation, or settlement of the claim or defense against the "suit"; and
 - d. Assist us, upon our request, in the enforcement of any right against any person or organization which may be liable to the insured because of a "wrongful act" to which this insurance may also apply.
4. No insureds will, except at their own cost, voluntarily make a payment, assume any obligation, or incur any expense without our consent.

C. Legal Action Against Us

No person or organization has a right under this Coverage Part:

1. To join us as a party or otherwise bring us into a "suit" asking for damages from an insured; or
2. To sue us on this Coverage Part

unless all of its terms have been fully complied with.

A person or organization may sue us to recover on an agreed settlement or on a final judgment against an insured obtained after an actual trial; but we will not be liable for "loss" amounts that are not payable under the terms of this Coverage Part or that are in excess of the applicable limit of insurance. An agreed settlement means a settlement and release of liability signed by us, the insured and the claimant or the claimant's legal representative.

D. Other Insurance

If other valid and collectible insurance is available to the insured for "loss" we cover under this coverage part, this insurance is primary. Our obligations are not affected unless any of the other insurance is also primary. Then, we will share with all that other insurance by the method described below.

Method of Sharing

1. If all of the other insurance permits contribution by equal shares, we will follow this method also. Under this approach, each insurer contributes equal amounts until it has paid its applicable limit of insurance or none of the "loss" remains, whichever comes first.
2. If any of the other insurance does not permit contribution by equal shares, we will contribute by limits. Under this method, each insurer's share is based on the ratio of its applicable limit of insurance to the total applicable limits of insurance of all insurers.

E. Premium Audit

1. We will compute all premiums for this Coverage Part in accordance with our rules and rates.
2. Premium shown in this Coverage Part as advance premium is a deposit premium only. At the close of each audit period we will compute the earned premium for that period. Audit premiums are due and payable on notice to the first Named Insured. If the sum of the advance and audit premiums paid for the "policy period" is greater than the earned premium, we will return the excess to the first Named Insured.
3. The first Named Insured must keep records of the information we need for premium computation, and send us copies at such time as we may request.

F. Representations

By accepting this policy, you agree:

1. The statements in the Declarations are accurate and complete;
2. Those statements are based upon representations you made to us; and
3. We have issued this policy in reliance upon your representations.

G. Separation Of Insureds

Except with respect to the Limits of Insurance, and any rights or duties specifically assigned in this Coverage Part to the first Named Insured, this insurance applies:

1. As if each Named Insured were the only Named Insured; and
2. Separately to each insured against whom claim is made or "suit" is brought.

H. Transfer Of Rights Of Recovery Against Others To Us

If the insured has rights to recover all or part of any payment we have made under this Coverage Part, those rights are transferred to us. The insured must do nothing after loss to impair them. At our request, the insured will bring "suit" or transfer those rights to us and help us enforce them.

I. Two Or More Coverage Parts

1. Except for the insurance provided by this Coverage Part, the policy to which this Coverage Part forms a part does not apply to any claim or "suit" seeking damages arising out of any "wrongful act".
2. If "one wrongful act" applies to this Coverage Part and any other Coverage Parts or policies that provide similar insurance but with different "policy periods" and are issued to you by us or any of our affiliates, the maximum limit of insurance for all such Coverage Parts or policies shall be the highest applicable limit of insurance under any Coverage Part or policy.

J. When We Do Not Renew

If we decide not to renew this Coverage Part, we will mail or deliver to the first Named Insured shown in the Declarations written notice of the nonrenewal not less than 30 days before the expiration date.

If notice is mailed, proof of mailing will be sufficient proof of notice.

Any State amendatory endorsement changing Nonrenewal Conditions for any part of the policy to which this Coverage Part forms a part, shall also apply to this Coverage Part.

K. Common Policy Conditions

The following additional conditions apply with respect to this Coverage Part:

1. The Common Policy Conditions contained in form IL 00 17, or if Common Policy Conditions form BP 00 09 is made a part of this policy, paragraphs A., B., D., E., I. and L. of that form; and
2. Any applicable State amendments thereto.

SECTION V – DEFINITIONS

A. "Coverage territory" means

1. The United States of America (including its territories and possessions), Puerto Rico and Canada;
2. International waters or airspace, provided the "wrongful act" does not occur in the course of travel or transportation to or from any place not included in 1. above;
3. All parts of the world if
 - a. The "loss" arises out of the activities of the person whose home is in the territory described in 1. above, but is away for a short time on your business; and
 - b. The insured's responsibility to pay "loss" is determined in a "suit" on the merits, in the territory described in 1. above or in a settlement we agree to.

B. "Employee" includes a "leased worker" or a substitute teacher. "Employee" does not include a "temporary worker".

C. "Executive officer" means a person holding any of the officer positions created by your charter, constitution, by-laws or any other similar governing document.

- D.** "Leased worker" means a person leased to you by a labor leasing firm under an agreement between you and the labor leasing firm, to perform duties related to the conduct of your business. "Leased worker" does not include a "temporary worker".
- E.** "Loss" means damages, judgments (including prejudgment interest awarded against the insured on that part of the judgment paid by us), or settlements. "Loss" does not include non-monetary relief, punitive or exemplary damages, multiplied portion of multiple damages, fines or penalties imposed by law, or matters deemed uninsurable according to the law under which this policy is construed.
- If we make an offer to pay the applicable limit of insurance, we will not pay any prejudgment interest based on that period of time after the offer.
- F.** "One wrongful act" means a single "wrongful act" or a series of related "wrongful acts" committed by one person, or by two or more persons acting together.
- G.** "Policy period" means the period stated in the Declarations of the policy of which this Coverage Part forms a part including an extension after issuance of the policy for an additional period of less than 12 months. However:
1. If this Coverage Part is issued to be effective subsequent to the effective date of such policy, the "policy period" for this Coverage Part will start with the effective date of the Coverage Part; and
 2. If this Coverage Part is cancelled prior to the expiration date of such policy, the "policy period" for this Coverage Part will end with the cancellation date of the Coverage Part.
- H.** "Suit" means a civil proceeding in which damages because of a "wrongful act" to which this insurance applies are alleged. "Suit" includes:
1. An arbitration proceeding in which such damages are claimed and to which you must submit or do submit with our consent; or
 2. Any other alternative dispute resolution proceeding in which such damages are claimed and to which you submit with our consent.
- I.** "Temporary worker" means a person other than a substitute teacher who is furnished to you to substitute for a permanent "employee" on leave or to meet seasonal or short- term workload conditions.
- J.** "Vicarious liability" means liability that the insured derives from the person who committed the "wrongful act" because of the relationship between such a person and the insured, and the "wrongful act" is committed without the knowledge, consent, direction or participation of the insured.
- K.** "Volunteer worker" means a person who donates her or his services to you with your knowledge and consent, and who is not paid a fee, salary or other remuneration.
- L.** "Wrongful act" means any actual or alleged sexual misconduct toward, or sexual molestation of, another person.

QUICK REFERENCE

SEXUAL MISCONDUCT AND MOLESTATION LIABILITY COVERAGE PART

READ YOUR POLICY CAREFULLY

The Sexual Misconduct and Molestation Liability Coverage Part in your policy consists of Declarations, a Coverage Form (17-78), Common Policy Conditions and Endorsements, if applicable. Following is a Quick Reference indexing of the principal provisions contained in each of the components making up the Coverage Part, listed in sequential order, except for the provisions in the Declarations and/or Schedule which may not be in the sequence shown.

DECLARATIONS/SCHEDULE

- Named Insured and Mailing Address
- Policy Period
- Limits of Insurance
- Premium
- Forms and Endorsements applying to the Coverage Form at time of issue

COVERAGE FORM (17-78)

SECTION I - COVERAGES

- Insuring Agreement
- Defense and Defense Expense
- Exclusions

SECTION II - WHO IS AN INSURED

SECTION III - LIMITS OF INSURANCE

SECTION IV - CONDITIONS

- Bankruptcy
- Duties In The Event Of A Wrongful Act, Claim Or Suit
- Legal Action Against Us
- Other Insurance
- Premium Audit
- Representations
- Separation Of Insureds
- Transfer Of Rights Of Recovery Against Others To Us
- Two Or More Coverage Parts
- When We Do Not Renew

SECTION V - DEFINITIONS

COMMON POLICY CONDITIONS

- Cancellations
- Changes
- Examination Of Your Books And Records
- Inspections And Surveys
- Premiums
- Transfer Of Your Rights And Duties Under This Policy

ENDORSEMENTS (If Any)

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION – ASBESTOS LIABILITY

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART
OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE PART
RAILROAD PROTECTIVE LIABILITY COVERAGE PART
COMMERCIAL PROTECTOR[®] LIABILITY COVERAGE FORM

This insurance does not apply to:

1. "Bodily injury", "property damage" or "personal and advertising injury" arising, in whole or in part, either directly or indirectly out of the manufacture, storage, processing, mining, use, sale, installation, removal, disposal, distribution, handling, inhalation, ingestion, absorption, or existence of, exposure to or contact with asbestos, asbestos contained in goods, products or materials, asbestos fibers or asbestos dust; or
2. Any loss, cost or expense arising out of any:
 - a. Request, demand, order, or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of asbestos, asbestos contained in goods, products or materials, asbestos fibers or asbestos dust; or
 - b. Claim or "suit" by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of asbestos, asbestos contained in goods, products or materials, asbestos fibers or asbestos dust.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

SEXUAL MISCONDUCT AND MOLESTATION LIABILITY EXCLUSION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

This insurance does not apply to "bodily injury", "property damage", or "personal and advertising injury" arising out of:

- 1.** Any actual or alleged sexual misconduct or sexual molestation of any person; and
- 2.** Any allegations relating thereto that:
 - a.** An insured negligently employed, investigated, trained, supervised, reported to proper authorities or failed to so report, or retained a person whose conduct would be excluded by **1.** above, or
 - b.** Are based on an alleged practice, custom or policy, including but not limited to any allegation that a person's civil rights have been violated.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION – SILICA

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
CUSTOM COMMERCIAL PROTECTOR GENERAL LIABILITY COVERAGE FORM

A. The following is added to paragraph 2. Exclusions of COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY under SECTION I – COVERAGES:

This insurance does not apply to:

Silica

- (1) “Bodily injury” arising, or allegedly arising, in whole or in part, from the inhalation, ingestion, absorption of or exposure to silica in any form or any substance containing silica, either alone, or in combination with other substances or factors, whether included in a product or otherwise; or
- (2) “Property damage” arising, or allegedly arising, in whole or in part, from silica in any form or any substance containing silica, either alone, or in combination with other substances or factors, whether included in a product or otherwise; or
- (3) Any loss, cost or expense arising out of any:
 - (a) Request, demand, order or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of silica in any form or any substance containing silica, either alone, or in combination with other substances or factors, whether included in a product or otherwise; or
 - (b) Claim or “suit” by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of silica in any form or any substance containing silica, either alone, or in combination with other substances or factors, whether included in a product or otherwise.

B. The following is added to paragraph 2. Exclusions of COVERAGE B PERSONAL AND ADVERTISING INJURY LIABILITY under SECTION I – COVERAGES:

This insurance does not apply to:

Silica

- (1) “Personal and advertising injury” arising, or allegedly arising, in whole or in part, from silica in any form or any substance containing silica, either alone, or in combination with other substances or factors, whether included in a product or otherwise; or
- (2) Any loss, cost or expense arising out of any:
 - (a) Request, demand, order or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of silica in any form or any substance containing silica, either alone, or in combination with other substances or factors, whether included in a product or otherwise; or
 - (b) Claim or “suit” by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of silica in any form or any substance containing silica, either alone, or in combination with other substances or factors, whether included in a product or otherwise.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

INNOCENT PARTY DEFENSE COVERAGE ENDORSEMENT

This endorsement modifies insurance provided under the following:

SEXUAL MISCONDUCT AND MOLESTATION LIABILITY COVERAGE PART

SCHEDULE

Aggregate Defense Expense Amount \$

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

With respect to any insured for whom insurance is not provided under Section **I.A. Insuring Agreement** because he or she allegedly commits, directs, participates in, has knowledge of or consents to a "wrongful act", Section **I.B. Defense and Defense Expense** is replaced by the following:

1. We will have the right but not the obligation to defend the insured against any "suit" seeking "loss". We may, at our discretion, investigate any "wrongful act" and settle any claim or "suit" that may result.
2. Subject to the Aggregate Defense Expense Amount shown in the Schedule:
 - a. We will pay "defense expenses" with respect to any "suit" against the insured we elect to defend. However, we have no obligation to pay any "loss" amounts the insured becomes legally obligated to pay, nor appeal any adverse judgments.
 - b. If we elect not to defend the insured against a "suit", we will only reimburse the insured for the amount of her or his "defense expenses" if there is a "final adjudication" in the "suit" that such insured did not commit, direct, participate in, have knowledge of or consent to a "wrongful act".

Our obligation to pay or reimburse for "defense expenses" ends when the Aggregate Defense Expense Amount has been used up in the payment or reimbursement of "defense expenses".

3. The Aggregate Defense Expense Amount is the most we will pay or reimburse for the sum of all "defense expenses" arising out of paragraph 2. above. If the "policy period" is for more than one year, the Aggregate Defense Expense Amount applies separately to each consecutive annual period, and to any remaining period of less than 12 months starting with the beginning of the "policy period". But if the "policy period" is extended after issuance for less than 12 months, the additional period will be deemed part of the last preceding period for the purposes of determining the Aggregate Defense Expense Amount.
4. As used in this endorsement:
 - a. "Defense expenses" means those reasonable and necessary expenses that result from the defense of a specific claim, including:
 - (1) Attorney and paralegal fees and expenses;

(2) Costs of legal proceedings;

(3) Expenses incurred by the insured at our request to assist us in the investigation or defense of the claim or "suit", including actual loss of earnings up to \$250 a day because of time off from work.

"Defense expenses" does not include salaries and expenses of our employees, including our employed attorneys, salaries and expense of the insured's employees (other than those described in paragraph a.(3) above), or fees and expenses of independent adjusters we hire.

b. "Final adjudication" means an actual trial involving the following:

(1) A finding of facts;

(2) A presentation of witnesses; and

(3) A final resolution on the merits in which all appeals are exhausted.

All other terms, conditions and exclusions shall remain the same.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAR LIABILITY EXCLUSION

This endorsement modifies insurance provided under the following:

DIRECTORS AND OFFICERS LIABILITY COVERAGE PART
(CONDOMINIUM ASSOCIATIONS AND HOMEOWNERS ASSOCIATIONS)
DIRECTORS AND OFFICERS LIABILITY COVERAGE PART
EMPLOYEE BENEFITS LIABILITY COVERAGE PART
EMPLOYERS STOP GAP LIABILITY COVERAGE PART
EMPLOYMENT PRACTICES LIABILITY COVERAGE PART
LAW ENFORCEMENT PROFESSIONAL LIABILITY COVERAGE PART
LIMITED POLLUTION LIABILITY COVERAGE PART – DESIGNATED STORAGE TANKS
PASTORAL PROFESSIONAL LIABILITY COVERAGE PART
PRINTERS ERRORS AND OMISSIONS LIABILITY COVERAGE PART
RELIGIOUS ORGANIZATIONS DIRECTORS AND OFFICERS LIABILITY COVERAGE PART
SCHOOL LEADERS ERRORS AND OMISSIONS COVERAGE PART
SEXUAL MISCONDUCT AND MOLESTATION LIABILITY COVERAGE PART

A. If your policy contains one or more of the following Coverage Parts:

DIRECTORS AND OFFICERS LIABILITY COVERAGE PART (CONDOMINIUM ASSOCIATIONS AND HOMEOWNERS ASSOCIATIONS)
DIRECTORS AND OFFICERS LIABILITY COVERAGE PART
EMPLOYEE BENEFITS LIABILITY COVERAGE PART
EMPLOYMENT PRACTICES LIABILITY COVERAGE PART
PASTORAL PROFESSIONAL LIABILITY COVERAGE PART
PRINTERS ERRORS AND OMISSIONS LIABILITY COVERAGE PART
RELIGIOUS ORGANIZATIONS DIRECTORS AND OFFICERS LIABILITY COVERAGE PART
SCHOOL LEADERS ERRORS AND OMISSIONS COVERAGE PART
SEXUAL MISCONDUCT AND MOLESTATION LIABILITY COVERAGE PART

The following exclusion is added:

This insurance does not apply to:

War

Injury or damage, however caused, arising, directly or indirectly, out of:

- (1) War, including undeclared or civil war; or
- (2) Warlike action by a military force, including action in hindering or defending against an actual or expected attack, by any government, sovereign or other authority using military personnel or other agents; or
- (3) Insurrection, rebellion, revolution, usurped power, or action taken by governmental authority in hindering or defending against any of these.

B. If your policy contains **LIMITED POLLUTION LIABILITY COVERAGE PART – DESIGNATED STORAGE TANKS**, the following exclusion is added to Section **I.C. Exclusions**:

This insurance does not apply to:

War

"Bodily injury", "property damage" or "corrective action costs", however caused, arising, directly or indirectly, out of:

- (1) War, including undeclared or civil war; or
- (2) Warlike action by a military force, including action in hindering or defending against an actual or expected attack, by any government, sovereign or other authority using military personnel or other agents; or
- (3) Insurrection, rebellion, revolution, usurped power, or action taken by governmental authority in hindering or defending against any of these.

- C. If your policy contains **EMPLOYERS STOP GAP LIABILITY COVERAGE PART**, exclusion 16. under Section I.C. **Exclusions** is replaced by the following:

This insurance does not apply to:

16. War

"Bodily injury", however caused, arising, directly or indirectly, out of:

- (1) War, including undeclared or civil war; or
- (2) Warlike action by a military force, including action in hindering or defending against an actual or expected attack, by any government, sovereign or other authority using military personnel or other agents; or
- (3) Insurrection, rebellion, revolution, usurped power, or action taken by governmental authority in hindering or defending against any of these.

- D. If your policy contains **LAW ENFORCEMENT PROFESSIONAL LIABILITY COVERAGE PART**, Section I.C. **Exclusions** is amended as follows:

1. Exclusion 12. is replaced by the following:

This insurance does not apply to:

12. Labor, Strike Or Civil Commotion

Any "claim" arising out of a labor strike, civil disturbance, riot or civil commotion.

2. The following exclusion is added:

This insurance does not apply to:

War

"Bodily injury", "personal injury" or "property damage", however caused, arising, directly or indirectly, out of:

- (1) War, including undeclared or civil war; or
- (2) Warlike action by a military force, including action in hindering or defending against an actual or expected attack, by any government, sovereign or other authority using military personnel or other agents; or
- (3) Insurrection, rebellion, revolution, usurped power, or action taken by governmental authority in hindering or defending against any of these.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

NON-CUMULATION OF LIABILITY (SAME OCCURRENCE)

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

The following is added to paragraph 5. under **SECTION III – LIMITS OF INSURANCE:**

Non-Cumulation of Liability – Same Occurrence – If one “occurrence” causes “bodily injury” or “property damage” during the policy period and during the policy period of one or more prior, or future, general liability policy(ies) issued to you by us, then this policy’s Each Occurrence Limit will be reduced by the amount of each payment made by us under the other policy(ies) because of such “occurrence.”

COMMERCIAL GENERAL LIABILITY COVERAGE FORM

Various provisions in this policy restrict coverage. Read the entire policy carefully to determine rights, duties and what is and is not covered.

Throughout this policy the words "you" and "your" refer to the Named Insured shown in the Declarations, and any other person or organization qualifying as a Named Insured under this policy. The words "we", "us" and "our" refer to the company providing this insurance.

The word "insured" means any person or organization qualifying as such under Section II – Who Is An Insured.

Other words and phrases that appear in quotation marks have special meaning. Refer to Section V – Definitions.

SECTION I – COVERAGES

COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY

1. Insuring Agreement

a. We will pay those sums that the insured becomes legally obligated to pay as damages because of "bodily injury" or "property damage" to which this insurance applies. We will have the right and duty to defend the insured against any "suit" seeking those damages. However, we will have no duty to defend the insured against any "suit" seeking damages for "bodily injury" or "property damage" to which this insurance does not apply. We may, at our discretion, investigate any "occurrence" and settle any claim or "suit" that may result. But:

- (1) The amount we will pay for damages is limited as described in Section III – Limits Of Insurance; and
- (2) Our right and duty to defend ends when we have used up the applicable limit of insurance in the payment of judgments or settlements under Coverages A or B or medical expenses under Coverage C.

No other obligation or liability to pay sums or perform acts or services is covered unless explicitly provided for under Supplementary Payments – Coverages A and B.

b. This insurance applies to "bodily injury" and "property damage" only if:

- (1) The "bodily injury" or "property damage" is caused by an "occurrence" that takes place in the "coverage territory";
- (2) The "bodily injury" or "property damage" occurs during the policy period; and
- (3) Prior to the policy period, no insured listed under Paragraph 1. of Section II – Who Is An Insured and no "employee" authorized by you to give or receive notice of an "occurrence" or claim, knew that the "bodily injury" or "property damage" had occurred, in whole or in part. If such a listed insured or authorized "employee" knew, prior to the policy period, that the "bodily injury" or "property damage" occurred, then any continuation, change or resumption of such "bodily injury" or "property damage" during or after the policy period will be deemed to have been known prior to the policy period.

c. "Bodily injury" or "property damage" which occurs during the policy period and was not, prior to the policy period, known to have occurred by any insured listed under Paragraph 1. of Section II – Who Is An Insured or any "employee" authorized by you to give or receive notice of an "occurrence" or claim, includes any continuation, change or resumption of that "bodily injury" or "property damage" after the end of the policy period.

d. "Bodily injury" or "property damage" will be deemed to have been known to have occurred at the earliest time when any insured listed under Paragraph 1. of Section II – Who Is An Insured or any "employee" authorized by you to give or receive notice of an "occurrence" or claim:

- (1) Reports all, or any part, of the "bodily injury" or "property damage" to us or any other insurer;
- (2) Receives a written or verbal demand or claim for damages because of the "bodily injury" or "property damage"; or
- (3) Becomes aware by any other means that "bodily injury" or "property damage" has occurred or has begun to occur.

- e. Damages because of "bodily injury" include damages claimed by any person or organization for care, loss of services or death resulting at any time from the "bodily injury".

2. Exclusions

This insurance does not apply to:

a. Expected Or Intended Injury

"Bodily injury" or "property damage" expected or intended from the standpoint of the insured. This exclusion does not apply to "bodily injury" resulting from the use of reasonable force to protect persons or property.

b. Contractual Liability

"Bodily injury" or "property damage" for which the insured is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages:

- (1) That the insured would have in the absence of the contract or agreement; or
- (2) Assumed in a contract or agreement that is an "insured contract", provided the "bodily injury" or "property damage" occurs subsequent to the execution of the contract or agreement. Solely for the purposes of liability assumed in an "insured contract", reasonable attorney fees and necessary litigation expenses incurred by or for a party other than an insured are deemed to be damages because of "bodily injury" or "property damage", provided:
 - (a) Liability to such party for, or for the cost of, that party's defense has also been assumed in the same "insured contract"; and
 - (b) Such attorney fees and litigation expenses are for defense of that party against a civil or alternative dispute resolution proceeding in which damages to which this insurance applies are alleged.

c. Liquor Liability

"Bodily injury" or "property damage" for which any insured may be held liable by reason of:

- (1) Causing or contributing to the intoxication of any person;
- (2) The furnishing of alcoholic beverages to a person under the legal drinking age or under the influence of alcohol; or
- (3) Any statute, ordinance or regulation relating to the sale, gift, distribution or use of alcoholic beverages.

This exclusion applies only if you are in the business of manufacturing, distributing, selling, serving or furnishing alcoholic beverages.

d. Workers' Compensation And Similar Laws

Any obligation of the insured under a workers' compensation, disability benefits or unemployment compensation law or any similar law.

e. Employer's Liability

"Bodily injury" to:

- (1) An "employee" of the insured arising out of and in the course of:
 - (a) Employment by the insured; or
 - (b) Performing duties related to the conduct of the insured's business; or
- (2) The spouse, child, parent, brother or sister of that "employee" as a consequence of Paragraph (1) above.

This exclusion applies:

- (1) Whether the insured may be liable as an employer or in any other capacity; and
- (2) To any obligation to share damages with or repay someone else who must pay damages because of the injury.

This exclusion does not apply to liability assumed by the insured under an "insured contract".

f. Pollution

- (1) "Bodily injury" or "property damage" arising out of the actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of "pollutants":
 - (a) At or from any premises, site or location which is or was at any time owned or occupied by, or rented or loaned to, any insured. However, this subparagraph does not apply to:
 - (i) "Bodily injury" if sustained within a building and caused by smoke, fumes, vapor or soot from equipment used to heat that building;
 - (ii) "Bodily injury" or "property damage" for which you may be held liable, if you are a contractor and the owner or lessee of such premises, site or location has been added to your policy as an additional insured with respect to your ongoing operations performed for that additional insured at that premises, site or location and such premises, site or location is not and never was owned or occupied by, or rented or loaned to, any insured, other than that additional insured; or
 - (iii) "Bodily injury" or "property damage" arising out of heat, smoke or fumes from a "hostile fire";
 - (b) At or from any premises, site or location which is or was at any time used by or for any insured or others for the handling, storage, disposal, processing or treatment of waste;
 - (c) Which are or were at any time transported, handled, stored, treated, disposed of, or processed as waste by or for:
 - (i) Any insured; or
 - (ii) Any person or organization for whom you may be legally responsible; or
 - (d) At or from any premises, site or location on which any insured or any contractors or subcontractors working directly or indirectly on any insured's behalf are performing operations if the "pollutants" are brought on or to the premises, site or location in connection with such operations by such insured, contractor or subcontractor. However, this subparagraph does not apply to:
 - (i) "Bodily injury" or "property damage" arising out of the escape of fuels, lubricants or other operating fluids which are needed to perform the normal electrical, hydraulic or mechanical functions necessary for the operation of "mobile equipment" or its parts, if such fuels, lubricants or other operating fluids escape from a vehicle part designed to hold, store or receive them. This exception does not apply if the "bodily injury" or "property damage" arises out of the intentional discharge, dispersal or release of the fuels, lubricants or other operating fluids, or if such fuels, lubricants or other operating fluids are brought on or to the premises, site or location with the intent that they be discharged, dispersed or released as part of the operations being performed by such insured, contractor or subcontractor;
 - (ii) "Bodily injury" or "property damage" sustained within a building and caused by the release of gases, fumes or vapors from materials brought into that building in connection with operations being performed by you or on your behalf by a contractor or subcontractor; or
 - (iii) "Bodily injury" or "property damage" arising out of heat, smoke or fumes from a "hostile fire".
 - (e) At or from any premises, site or location on which any insured or any contractors or subcontractors working directly or indirectly on any insured's behalf are performing operations if the operations are to test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of, "pollutants".
- (2) Any loss, cost or expense arising out of any:
 - (a) Request, demand, order or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of, "pollutants"; or
 - (b) Claim or "suit" by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of, "pollutants".

However, this paragraph does not apply to liability for damages because of "property damage" that the insured would have in the absence of such request, demand, order or statutory or regulatory requirement, or such claim or "suit" by or on behalf of a governmental authority.

g. Aircraft, Auto Or Watercraft

"Bodily injury" or "property damage" arising out of the ownership, maintenance, use or entrustment to others of any aircraft, "auto" or watercraft owned or operated by or rented or loaned to any insured. Use includes operation and "loading or unloading".

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage" involved the ownership, maintenance, use or entrustment to others of any aircraft, "auto" or watercraft that is owned or operated by or rented or loaned to any insured.

This exclusion does not apply to:

- (1) A watercraft while ashore on premises you own or rent;
- (2) A watercraft you do not own that is:
 - (a) Less than 26 feet long; and
 - (b) Not being used to carry persons or property for a charge;
- (3) Parking an "auto" on, or on the ways next to, premises you own or rent, provided the "auto" is not owned by or rented or loaned to you or the insured;
- (4) Liability assumed under any "insured contract" for the ownership, maintenance or use of aircraft or watercraft; or
- (5) "Bodily injury" or "property damage" arising out of the operation of any of the equipment listed in Paragraph **f.(2)** or **f.(3)** of the definition of "mobile equipment".

h. Mobile Equipment

"Bodily injury" or "property damage" arising out of:

- (1) The transportation of "mobile equipment" by an "auto" owned or operated by or rented or loaned to any insured; or
- (2) The use of "mobile equipment" in, or while in practice for, or while being prepared for, any prearranged racing, speed, demolition, or stunting activity.

i. War

"Bodily injury" or "property damage" due to war, whether or not declared, or any act or condition incident to war. War includes civil war, insurrection, rebellion or revolution. This exclusion applies only to liability assumed under a contract or agreement.

j. Damage To Property

"Property damage" to:

- (1) Property you own, rent, or occupy, including any costs or expenses incurred by you, or any other person, organization or entity, for repair, replacement, enhancement, restoration or maintenance of such property for any reason, including prevention of injury to a person or damage to another's property;
- (2) Premises you sell, give away or abandon, if the "property damage" arises out of any part of those premises;
- (3) Property loaned to you;
- (4) Personal property in the care, custody or control of the insured;
- (5) That particular part of real property on which you or any contractors or subcontractors working directly or indirectly on your behalf are performing operations, if the "property damage" arises out of those operations; or
- (6) That particular part of any property that must be restored, repaired or replaced because "your work" was incorrectly performed on it.

Paragraphs **(1)**, **(3)** and **(4)** of this exclusion do not apply to "property damage" (other than damage by fire) to premises, including the contents of such premises, rented to you for a period of 7 or fewer consecutive days. A separate limit of insurance applies to Damage To Premises Rented To You as described in Section **III – Limits Of Insurance**.

Paragraph **(2)** of this exclusion does not apply if the premises are "your work" and were never occupied, rented or held for rental by you.

Paragraphs **(3)**, **(4)**, **(5)** and **(6)** of this exclusion do not apply to liability assumed under a sidetrack agreement.

Paragraph **(6)** of this exclusion does not apply to "property damage" included in the "products-completed operations hazard".

k. Damage To Your Product

"Property damage" to "your product" arising out of it or any part of it.

l. Damage To Your Work

"Property damage" to "your work" arising out of it or any part of it and included in the "products-completed operations hazard".

This exclusion does not apply if the damaged work or the work out of which the damage arises was performed on your behalf by a subcontractor.

m. Damage To Impaired Property Or Property Not Physically Injured

"Property damage" to "impaired property" or property that has not been physically injured, arising out of:

- (1)** A defect, deficiency, inadequacy or dangerous condition in "your product" or "your work"; or
- (2)** A delay or failure by you or anyone acting on your behalf to perform a contract or agreement in accordance with its terms.

This exclusion does not apply to the loss of use of other property arising out of sudden and accidental physical injury to "your product" or "your work" after it has been put to its intended use.

n. Recall Of Products, Work Or Impaired Property

Damages claimed for any loss, cost or expense incurred by you or others for the loss of use, withdrawal, recall, inspection, repair, replacement, adjustment, removal or disposal of:

- (1)** "Your product";
- (2)** "Your work"; or
- (3)** "Impaired property";

if such product, work, or property is withdrawn or recalled from the market or from use by any person or organization because of a known or suspected defect, deficiency, inadequacy or dangerous condition in it.

o. Personal And Advertising Injury

"Bodily injury" arising out of "personal and advertising injury".

Exclusions **c.** through **n.** do not apply to damage by fire to premises while rented to you or temporarily occupied by you with permission of the owner. A separate limit of insurance applies to this coverage as described in Section **III – Limits Of Insurance**.

COVERAGE B PERSONAL AND ADVERTISING INJURY LIABILITY

1. Insuring Agreement

a. We will pay those sums that the insured becomes legally obligated to pay as damages because of "personal and advertising injury" to which this insurance applies. We will have the right and duty to defend the insured against any "suit" seeking those damages. However, we will have no duty to defend the insured against any "suit" seeking damages for "personal and advertising injury" to which this insurance does not apply. We may, at our discretion, investigate any offense and settle any claim or "suit" that may result. But:

- (1)** The amount we will pay for damages is limited as described in Section **III – Limits Of Insurance** ; and

(2) Our right and duty to defend end when we have used up the applicable limit of insurance in the payment of judgments or settlements under Coverages **A** or **B** or medical expenses under Coverage **C**.

No other obligation or liability to pay sums or perform acts or services is covered unless explicitly provided for under Supplementary Payments – Coverages **A** and **B**.

b. This insurance applies to "personal and advertising injury" caused by an offense arising out of your business but only if the offense was committed in the "coverage territory" during the policy period.

2. Exclusions

This insurance does not apply to:

a. Knowing Violation Of Rights Of Another

"Personal and advertising injury" caused by or at the direction of the insured with the knowledge that the act would violate the rights of another and would inflict "personal and advertising injury".

b. Material Published With Knowledge Of Falsity

"Personal and advertising injury" arising out of oral or written publication of material, if done by or at the direction of the insured with knowledge of its falsity.

c. Material Published Prior To Policy Period

"Personal and advertising injury" arising out of oral or written publication of material whose first publication took place before the beginning of the policy period.

d. Criminal Acts

"Personal and advertising injury" arising out of a criminal act committed by or at the direction of the insured.

e. Contractual Liability

"Personal and advertising injury" for which the insured has assumed liability in a contract or agreement. This exclusion does not apply to liability for damages that the insured would have in the absence of the contract or agreement.

f. Breach Of Contract

"Personal and advertising injury" arising out of a breach of contract, except an implied contract to use another's advertising idea in your "advertisement".

g. Quality Or Performance Of Goods – Failure To Conform To Statements

"Personal and advertising injury" arising out of the failure of goods, products or services to conform with any statement of quality or performance made in your "advertisement".

h. Wrong Description Of Prices

"Personal and advertising injury" arising out of the wrong description of the price of goods, products or services stated in your "advertisement".

i. Infringement Of Copyright, Patent, Trademark Or Trade Secret

"Personal and advertising injury" arising out of the infringement of copyright, patent, trademark, trade secret or other intellectual property rights.

However, this exclusion does not apply to infringement, in your "advertisement", of copyright, trade dress or slogan.

j. Insureds In Media And Internet Type Businesses

"Personal and advertising injury" committed by an insured whose business is:

(1) Advertising, broadcasting, publishing or telecasting;

(2) Designing or determining content of web-sites for others; or

(3) An Internet search, access, content or service provider.

However, this exclusion does not apply to Paragraphs **14.a.**, **b.** and **c.** of "personal and advertising injury" under the Definitions Section.

For the purposes of this exclusion, the placing of frames, borders or links, or advertising, for you or others anywhere on the Internet, is not by itself, considered the business of advertising, broadcasting, publishing or telecasting.

k. Electronic Chatrooms Or Bulletin Boards

"Personal and advertising injury" arising out of an electronic chatroom or bulletin board the insured hosts, owns, or over which the insured exercises control.

l. Unauthorized Use Of Another's Name Or Product

"Personal and advertising injury" arising out of the unauthorized use of another's name or product in your e-mail address, domain name or metatag, or any other similar tactics to mislead another's potential customers.

m. Pollution

"Personal and advertising injury" arising out of the actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of "pollutants" at any time.

n. Pollution-Related

Any loss, cost or expense arising out of any:

- (1) Request, demand or order that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of, "pollutants"; or
- (2) Claim or suit by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of, "pollutants".

COVERAGE C MEDICAL PAYMENTS

1. Insuring Agreement

a. We will pay medical expenses as described below for "bodily injury" caused by an accident:

- (1) On premises you own or rent;
- (2) On ways next to premises you own or rent; or
- (3) Because of your operations;

provided that:

- (1) The accident takes place in the "coverage territory" and during the policy period;
- (2) The expenses are incurred and reported to us within one year of the date of the accident; and
- (3) The injured person submits to examination, at our expense, by physicians of our choice as often as we reasonably require.

b. We will make these payments regardless of fault. These payments will not exceed the applicable limit of insurance. We will pay reasonable expenses for:

- (1) First aid administered at the time of an accident;
- (2) Necessary medical, surgical, x-ray and dental services, including prosthetic devices; and
- (3) Necessary ambulance, hospital, professional nursing and funeral services.

2. Exclusions

We will not pay expenses for "bodily injury":

a. Any Insured

To any insured, except "volunteer workers".

b. Hired Person

To a person hired to do work for or on behalf of any insured or a tenant of any insured.

c. Injury On Normally Occupied Premises

To a person injured on that part of premises you own or rent that the person normally occupies.

d. Workers Compensation And Similar Laws

To a person, whether or not an "employee" of any insured, if benefits for the "bodily injury" are payable or must be provided under a workers' compensation or disability benefits law or a similar law.

e. Athletics Activities

To a person injured while taking part in athletics.

f. Products-Completed Operations Hazard

Included within the "products-completed operations hazard".

g. Coverage A Exclusions

Excluded under Coverage A.

h. War

Due to war, whether or not declared, or any act or condition incident to war. War includes civil war, insurrection, rebellion or revolution.

SUPPLEMENTARY PAYMENTS – COVERAGES A AND B

1. We will pay, with respect to any claim we investigate or settle, or any "suit" against an insured we defend:
 - a. All expenses we incur.
 - b. Up to \$250 for cost of bail bonds required because of accidents or traffic law violations arising out of the use of any vehicle to which the Bodily Injury Liability Coverage applies. We do not have to furnish these bonds.
 - c. The cost of bonds to release attachments, but only for bond amounts within the applicable limit of insurance. We do not have to furnish these bonds.
 - d. All reasonable expenses incurred by the insured at our request to assist us in the investigation or defense of the claim or "suit", including actual loss of earnings up to \$250 a day because of time off from work.
 - e. All costs taxed against the insured in the "suit".
 - f. Prejudgment interest awarded against the insured on that part of the judgment we pay. If we make an offer to pay the applicable limit of insurance, we will not pay any prejudgment interest based on that period of time after the offer.
 - g. All interest on the full amount of any judgment that accrues after entry of the judgment and before we have paid, offered to pay, or deposited in court the part of the judgment that is within the applicable limit of insurance.

These payments will not reduce the limits of insurance.

2. If we defend an insured against a "suit" and an indemnitee of the insured is also named as a party to the "suit", we will defend that indemnitee if all of the following conditions are met:
 - a. The "suit" against the indemnitee seeks damages for which the insured has assumed the liability of the indemnitee in a contract or agreement that is an "insured contract";
 - b. This insurance applies to such liability assumed by the insured;
 - c. The obligation to defend, or the cost of the defense of, that indemnitee, has also been assumed by the insured in the same "insured contract";
 - d. The allegations in the "suit" and the information we know about the "occurrence" are such that no conflict appears to exist between the interests of the insured and the interests of the indemnitee;
 - e. The indemnitee and the insured ask us to conduct and control the defense of that indemnitee against such "suit" and agree that we can assign the same counsel to defend the insured and the indemnitee; and
 - f. The indemnitee:
 - (1) Agrees in writing to:
 - (a) Cooperate with us in the investigation, settlement or defense of the "suit";

- (b) Immediately send us copies of any demands, notices, summonses or legal papers received in connection with the "suit";
 - (c) Notify any other insurer whose coverage is available to the indemnitee; and
 - (d) Cooperate with us with respect to coordinating other applicable insurance available to the indemnitee; and
- (2) Provides us with written authorization to:
- (a) Obtain records and other information related to the "suit"; and
 - (b) Conduct and control the defense of the indemnitee in such "suit".

So long as the above conditions are met, attorneys' fees incurred by us in the defense of that indemnitee, necessary litigation expenses incurred by us and necessary litigation expenses incurred by the indemnitee at our request will be paid as Supplementary Payments. Notwithstanding the provisions of Paragraph **2.b.(2)** of Section I – Coverage A – Bodily Injury And Property Damage Liability, such payments will not be deemed to be damages for "bodily injury" and "property damage" and will not reduce the limits of insurance.

Our obligation to defend an insured's indemnitee and to pay for attorneys' fees and necessary litigation expenses as Supplementary Payments ends when:

- a. We have used up the applicable limit of insurance in the payment of judgments or settlements; or
- b. The conditions set forth above, or the terms of the agreement described in Paragraph f. above, are no longer met.

SECTION II – WHO IS AN INSURED

1. If you are designated in the Declarations as:
 - a. An individual, you and your spouse are insureds, but only with respect to the conduct of a business of which you are the sole owner.
 - b. A partnership or joint venture, you are an insured. Your members, your partners, and their spouses are also insureds, but only with respect to the conduct of your business.
 - c. A limited liability company, you are an insured. Your members are also insureds, but only with respect to the conduct of your business. Your managers are insureds, but only with respect to their duties as your managers.
 - d. An organization other than a partnership, joint venture or limited liability company, you are an insured. Your "executive officers" and directors are insureds, but only with respect to their duties as your officers or directors. Your stockholders are also insureds, but only with respect to their liability as stockholders.
 - e. A trust, you are an insured. Your trustees are also insureds, but only with respect to their duties as trustees.
2. Each of the following is also an insured:
 - a. Your "volunteer workers" only while performing duties related to the conduct of your business, or your "employees", other than either your "executive officers" (if you are an organization other than a partnership, joint venture or limited liability company) or your managers (if you are a limited liability company), but only for acts within the scope of their employment by you or while performing duties related to the conduct of your business. However, none of these "employees" or "volunteer workers" are insureds for:
 - (1) "Bodily injury" or "personal and advertising injury":
 - (a) To you, to your partners or members (if you are a partnership or joint venture), to your members (if you are a limited liability company), to a co-"employee" while in the course of his or her employment or performing duties related to the conduct of your business, or to your other "volunteer workers" while performing duties related to the conduct of your business;
 - (b) To the spouse, child, parent, brother or sister of that co-"employee" or "volunteer worker" as a consequence of Paragraph (1)(a) above;
 - (c) For which there is any obligation to share damages with or repay someone else who must pay damages because of the injury described in Paragraphs (1)(a) or (b) above; or
 - (d) Arising out of his or her providing or failing to provide professional health care services.

- (2) "Property damage" to property:
 - (a) Owned, occupied or used by,
 - (b) Rented to, in the care, custody or control of, or over which physical control is being exercised for any purpose by
 - you, any of your "employees", "volunteer workers", any partner or member (if you are a partnership or joint venture), or any member (if you are a limited liability company).
 - b. Any person (other than your "employee" or "volunteer worker"), or any organization while acting as your real estate manager.
 - c. Any person or organization having proper temporary custody of your property if you die, but only:
 - (1) With respect to liability arising out of the maintenance or use of that property; and
 - (2) Until your legal representative has been appointed.
 - d. Your legal representative if you die, but only with respect to duties as such. That representative will have all your rights and duties under this Coverage Part.
3. With respect to "mobile equipment" registered in your name under any motor vehicle registration law, any person is an insured while driving such equipment along a public highway with your permission. Any other person or organization responsible for the conduct of such person is also an insured, but only with respect to liability arising out of the operation of the equipment, and only if no other insurance of any kind is available to that person or organization for this liability. However, no person or organization is an insured with respect to:
 - a. "Bodily injury" to a co-"employee" of the person driving the equipment; or
 - b. "Property damage" to property owned by, rented to, in the charge of or occupied by you or the employer of any person who is an insured under this provision.
 4. Any organization you newly acquire or form, other than a partnership, joint venture or limited liability company, and over which you maintain ownership or majority interest, will qualify as a Named Insured if there is no other similar insurance available to that organization. However:
 - a. Coverage under this provision is afforded only until the 90th day after you acquire or form the organization or the end of the policy period, whichever is earlier;
 - b. Coverage **A** does not apply to "bodily injury" or "property damage" that occurred before you acquired or formed the organization; and
 - c. Coverage **B** does not apply to "personal and advertising injury" arising out of an offense committed before you acquired or formed the organization.

No person or organization is an insured with respect to the conduct of any current or past partnership, joint venture or limited liability company that is not shown as a Named Insured in the Declarations.

SECTION III – LIMITS OF INSURANCE

1. The Limits of Insurance shown in the Declarations and the rules below fix the most we will pay regardless of the number of:
 - a. Insureds;
 - b. Claims made or "suits" brought; or
 - c. Persons or organizations making claims or bringing "suits".
2. The General Aggregate Limit is the most we will pay for the sum of:
 - a. Medical expenses under Coverage **C**;
 - b. Damages under Coverage **A**, except damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard"; and
 - c. Damages under Coverage **B**.
3. The Products-Completed Operations Aggregate Limit is the most we will pay under Coverage **A** for damages because of "bodily injury" and "property damage" included in the "products-completed operations hazard".

4. Subject to **2.** above, the Personal and Advertising Injury Limit is the most we will pay under Coverage **B** for the sum of all damages because of all "personal and advertising injury" sustained by any one person or organization.
5. Subject to **2.** or **3.** above, whichever applies, the Each Occurrence Limit is the most we will pay for the sum of:
 - a. Damages under Coverage **A**; and
 - b. Medical expenses under Coverage **C**
 because of all "bodily injury" and "property damage" arising out of any one "occurrence".
6. Subject to **5.** above, the Damage To Premises Rented To You Limit is the most we will pay under Coverage **A** for damages because of "property damage" to any one premises, while rented to you, or in the case of damage by fire, while rented to you or temporarily occupied by you with permission of the owner.
7. Subject to **5.** above, the Medical Expense Limit is the most we will pay under Coverage **C** for all medical expenses because of "bodily injury" sustained by any one person.

The Limits of Insurance of this Coverage Part apply separately to each consecutive annual period and to any remaining period of less than 12 months, starting with the beginning of the policy period shown in the Declarations, unless the policy period is extended after issuance for an additional period of less than 12 months. In that case, the additional period will be deemed part of the last preceding period for purposes of determining the Limits of Insurance.

SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS

1. Bankruptcy

Bankruptcy or insolvency of the insured or of the insured's estate will not relieve us of our obligations under this Coverage Part.

2. Duties In The Event Of Occurrence, Offense, Claim Or Suit

- a. You must see to it that we are notified as soon as practicable of an "occurrence" or an offense which may result in a claim. To the extent possible, notice should include:
 - (1) How, when and where the "occurrence" or offense took place;
 - (2) The names and addresses of any injured persons and witnesses; and
 - (3) The nature and location of any injury or damage arising out of the "occurrence" or offense.
- b. If a claim is made or "suit" is brought against any insured, you must:
 - (1) Immediately record the specifics of the claim or "suit" and the date received; and
 - (2) Notify us as soon as practicable.

You must see to it that we receive written notice of the claim or "suit" as soon as practicable.

c. You and any other involved insured must:

- (1) Immediately send us copies of any demands, notices, summonses or legal papers received in connection with the claim or "suit";
 - (2) Authorize us to obtain records and other information;
 - (3) Cooperate with us in the investigation or settlement of the claim or defense against the "suit"; and
 - (4) Assist us, upon our request, in the enforcement of any right against any person or organization which may be liable to the insured because of injury or damage to which this insurance may also apply.
- d. No insured will, except at that insured's own cost, voluntarily make a payment, assume any obligation, or incur any expense, other than for first aid, without our consent.

3. Legal Action Against Us

No person or organization has a right under this Coverage Part:

- a. To join us as a party or otherwise bring us into a "suit" asking for damages from an insured; or
- b. To sue us on this Coverage Part unless all of its terms have been fully complied with.

A person or organization may sue us to recover on an agreed settlement or on a final judgment against an insured; but we will not be liable for damages that are not payable under the terms of this Coverage Part or that are in excess of the applicable limit of insurance. An agreed settlement means a settlement and release of liability signed by us, the insured and the claimant or the claimant's legal representative.

4. Other Insurance

If other valid and collectible insurance is available to the insured for a loss we cover under Coverages **A** or **B** of this Coverage Part, our obligations are limited as follows:

a. Primary Insurance

This insurance is primary except when **b.** below applies. If this insurance is primary, our obligations are not affected unless any of the other insurance is also primary. Then, we will share with all that other insurance by the method described in **c.** below.

b. Excess Insurance

This insurance is excess over:

- (1) Any of the other insurance, whether primary, excess, contingent or on any other basis:
 - (a) That is Fire, Extended Coverage, Builder's Risk, Installation Risk or similar coverage for "your work";
 - (b) That is Fire insurance for premises rented to you or temporarily occupied by you with permission of the owner;
 - (c) That is insurance purchased by you to cover your liability as a tenant for "property damage" to premises rented to you or temporarily occupied by you with permission of the owner; or
 - (d) If the loss arises out of the maintenance or use of aircraft, "autos" or watercraft to the extent not subject to Exclusion **g.** of Section **I** – Coverage **A** – Bodily Injury And Property Damage Liability.
- (2) Any other primary insurance available to you covering liability for damages arising out of the premises or operations for which you have been added as an additional insured by attachment of an endorsement.

When this insurance is excess, we will have no duty under Coverages **A** or **B** to defend the insured against any "suit" if any other insurer has a duty to defend the insured against that "suit". If no other insurer defends, we will undertake to do so, but we will be entitled to the insured's rights against all those other insurers.

When this insurance is excess over other insurance, we will pay only our share of the amount of the loss, if any, that exceeds the sum of:

- (1) The total amount that all such other insurance would pay for the loss in the absence of this insurance; and
- (2) The total of all deductible and self-insured amounts under all that other insurance.

We will share the remaining loss, if any, with any other insurance that is not described in this Excess Insurance provision and was not bought specifically to apply in excess of the Limits of Insurance shown in the Declarations of this Coverage Part.

c. Method Of Sharing

If all of the other insurance permits contribution by equal shares, we will follow this method also. Under this approach each insurer contributes equal amounts until it has paid its applicable limit of insurance or none of the loss remains, whichever comes first.

If any of the other insurance does not permit contribution by equal shares, we will contribute by limits. Under this method, each insurer's share is based on the ratio of its applicable limit of insurance to the total applicable limits of insurance of all insurers.

5. Premium Audit

- a. We will compute all premiums for this Coverage Part in accordance with our rules and rates.

- b. Premium shown in this Coverage Part as advance premium is a deposit premium only. At the close of each audit period we will compute the earned premium for that period and send notice to the first Named Insured. The due date for audit and retrospective premiums is the date shown as the due date on the bill. If the sum of the advance and audit premiums paid for the policy period is greater than the earned premium, we will return the excess to the first Named Insured.
- c. The first Named Insured must keep records of the information we need for premium computation, and send us copies at such times as we may request.

6. Representations

By accepting this policy, you agree:

- a. The statements in the Declarations are accurate and complete;
- b. Those statements are based upon representations you made to us; and
- c. We have issued this policy in reliance upon your representations.

7. Separation Of Insureds

Except with respect to the Limits of Insurance, and any rights or duties specifically assigned in this Coverage Part to the first Named Insured, this insurance applies:

- a. As if each Named Insured were the only Named Insured; and
- b. Separately to each insured against whom claim is made or "suit" is brought.

8. Transfer Of Rights Of Recovery Against Others To Us

If the insured has rights to recover all or part of any payment we have made under this Coverage Part, those rights are transferred to us. The insured must do nothing after loss to impair them. At our request, the insured will bring "suit" or transfer those rights to us and help us enforce them.

9. When We Do Not Renew

If we decide not to renew this Coverage Part, we will mail or deliver to the first Named Insured shown in the Declarations written notice of the nonrenewal not less than 30 days before the expiration date.

If notice is mailed, proof of mailing will be sufficient proof of notice.

SECTION V – DEFINITIONS

- 1. "Advertisement" means a notice that is broadcast or published to the general public or specific market segments about your goods, products or services for the purpose of attracting customers or supporters. For the purposes of this definition:
 - a. Notices that are published include material placed on the Internet or on similar electronic means of communication; and
 - b. Regarding web-sites, only that part of a web-site that is about your goods, products or services for the purposes of attracting customers or supporters is considered an advertisement.
- 2. "Auto" means a land motor vehicle, trailer or semitrailer designed for travel on public roads, including any attached machinery or equipment. But "auto" does not include "mobile equipment".
- 3. "Bodily injury" means bodily injury, sickness or disease sustained by a person, including death resulting from any of these at any time.
- 4. "Coverage territory" means:
 - a. The United States of America (including its territories and possessions), Puerto Rico and Canada;
 - b. International waters or airspace, but only if the injury or damage occurs in the course of travel or transportation between any places included in a. above; or
 - c. All other parts of the world if the injury or damage arises out of:
 - (1) Goods or products made or sold by you in the territory described in a. above;
 - (2) The activities of a person whose home is in the territory described in a. above, but is away for a short time on your business; or

- (3)** "Personal and advertising injury" offenses that take place through the Internet or similar electronic means of communication

provided the insured's responsibility to pay damages is determined in a "suit" on the merits, in the territory described in **a.** above or in a settlement we agree to.

- 5.** "Employee" includes a "leased worker". "Employee" does not include a "temporary worker".
- 6.** "Executive officer" means a person holding any of the officer positions created by your charter, constitution, by-laws or any other similar governing document.
- 7.** "Hostile fire" means one which becomes uncontrollable or breaks out from where it was intended to be.
- 8.** "Impaired property" means tangible property, other than "your product" or "your work", that cannot be used or is less useful because:
- a.** It incorporates "your product" or "your work" that is known or thought to be defective, deficient, inadequate or dangerous; or
 - b.** You have failed to fulfill the terms of a contract or agreement;
- if such property can be restored to use by:
- a.** The repair, replacement, adjustment or removal of "your product" or "your work"; or
 - b.** Your fulfilling the terms of the contract or agreement.
- 9.** "Insured contract" means:
- a.** A contract for a lease of premises. However, that portion of the contract for a lease of premises that indemnifies any person or organization for damage by fire to premises while rented to you or temporarily occupied by you with permission of the owner is not an "insured contract";
 - b.** A sidetrack agreement;
 - c.** Any easement or license agreement, except in connection with construction or demolition operations on or within 50 feet of a railroad;
 - d.** An obligation, as required by ordinance, to indemnify a municipality, except in connection with work for a municipality;
 - e.** An elevator maintenance agreement;
 - f.** That part of any other contract or agreement pertaining to your business (including an indemnification of a municipality in connection with work performed for a municipality) under which you assume the tort liability of another party to pay for "bodily injury" or "property damage" to a third person or organization. Tort liability means a liability that would be imposed by law in the absence of any contract or agreement.
- Paragraph **f.** does not include that part of any contract or agreement:
- (1)** That indemnifies a railroad for "bodily injury" or "property damage" arising out of construction or demolition operations, within 50 feet of any railroad property and affecting any railroad bridge or trestle, tracks, road-beds, tunnel, underpass or crossing;
 - (2)** That indemnifies an architect, engineer or surveyor for injury or damage arising out of:
 - (a)** Preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
 - (b)** Giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage; or
 - (3)** Under which the insured, if an architect, engineer or surveyor, assumes liability for an injury or damage arising out of the insured's rendering or failure to render professional services, including those listed in **(2)** above and supervisory, inspection, architectural or engineering activities.
- 10.** "Leased worker" means a person leased to you by a labor leasing firm under an agreement between you and the labor leasing firm, to perform duties related to the conduct of your business. "Leased worker" does not include a "temporary worker".

- 11.** "Loading or unloading" means the handling of property:
- a.** After it is moved from the place where it is accepted for movement into or onto an aircraft, watercraft or "auto";
 - b.** While it is in or on an aircraft, watercraft or "auto"; or
 - c.** While it is being moved from an aircraft, watercraft or "auto" to the place where it is finally delivered;
- but "loading or unloading" does not include the movement of property by means of a mechanical device, other than a hand truck, that is not attached to the aircraft, watercraft or "auto".
- 12.** "Mobile equipment" means any of the following types of land vehicles, including any attached machinery or equipment:
- a.** Bulldozers, farm machinery, forklifts and other vehicles designed for use principally off public roads;
 - b.** Vehicles maintained for use solely on or next to premises you own or rent;
 - c.** Vehicles that travel on crawler treads;
 - d.** Vehicles, whether self-propelled or not, maintained primarily to provide mobility to permanently mounted:
 - (1)** Power cranes, shovels, loaders, diggers or drills; or
 - (2)** Road construction or resurfacing equipment such as graders, scrapers or rollers;
 - e.** Vehicles not described in **a.**, **b.**, **c.** or **d.** above that are not self-propelled and are maintained primarily to provide mobility to permanently attached equipment of the following types:
 - (1)** Air compressors, pumps and generators, including spraying, welding, building cleaning, geophysical exploration, lighting and well servicing equipment; or
 - (2)** Cherry pickers and similar devices used to raise or lower workers;
 - f.** Vehicles not described in **a.**, **b.**, **c.** or **d.** above maintained primarily for purposes other than the transportation of persons or cargo.
- However, self-propelled vehicles with the following types of permanently attached equipment are not "mobile equipment" but will be considered "autos":
- (1)** Equipment designed primarily for:
 - (a)** Snow removal;
 - (b)** Road maintenance, but not construction or resurfacing; or
 - (c)** Street cleaning;
 - (2)** Cherry pickers and similar devices mounted on automobile or truck chassis and used to raise or lower workers; and
 - (3)** Air compressors, pumps and generators, including spraying, welding, building cleaning, geophysical exploration, lighting and well servicing equipment.
- 13.** "Occurrence" means an accident, including continuous or repeated exposure to substantially the same general harmful conditions.
- 14.** "Personal and advertising injury" means injury, including consequential "bodily injury", arising out of one or more of the following offenses:
- a.** False arrest, detention or imprisonment;
 - b.** Malicious prosecution;
 - c.** The wrongful eviction from, wrongful entry into, or invasion of the right of private occupancy of a room, dwelling or premises that a person occupies, committed by or on behalf of its owner, landlord or lessor;
 - d.** Oral or written publication, in any manner, of material that slanders or libels a person or organization or disparages a person's or organization's goods, products or services;
 - e.** Oral or written publication, in any manner, of material that violates a person's right of privacy;
 - f.** The use of another's advertising idea in your "advertisement"; or

- g.** Infringing upon another's copyright, trade dress or slogan in your "advertisement".
- 15.** "Pollutants" mean any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals and waste. Waste includes materials to be recycled, reconditioned or re-claimed.
- 16.** "Products-completed operations hazard":
- a.** Includes all "bodily injury" and "property damage" occurring away from premises you own or rent and arising out of "your product" or "your work" except:
- (1)** Products that are still in your physical possession; or
 - (2)** Work that has not yet been completed or abandoned. However, "your work" will be deemed completed at the earliest of the following times:
 - (a)** When all of the work called for in your contract has been completed.
 - (b)** When all of the work to be done at the job site has been completed if your contract calls for work at more than one job site.
 - (c)** When that part of the work done at a job site has been put to its intended use by any person or organization other than another contractor or subcontractor working on the same project.

Work that may need service, maintenance, correction, repair or replacement, but which is otherwise complete, will be treated as completed.
- b.** Does not include "bodily injury" or "property damage" arising out of:
- (1)** The transportation of property, unless the injury or damage arises out of a condition in or on a vehicle not owned or operated by you, and that condition was created by the "loading or unloading" of that vehicle by any insured;
 - (2)** The existence of tools, uninstalled equipment or abandoned or unused materials; or
 - (3)** Products or operations for which the classification, listed in the Declarations or in a policy schedule, states that products-completed operations are subject to the General Aggregate Limit.
- 17.** "Property damage" means:
- a.** Physical injury to tangible property, including all resulting loss of use of that property. All such loss of use shall be deemed to occur at the time of the physical injury that caused it; or
 - b.** Loss of use of tangible property that is not physically injured. All such loss of use shall be deemed to occur at the time of the "occurrence" that caused it.
- For the purposes of this insurance, electronic data is not tangible property.
- As used in this definition, electronic data means information, facts or programs stored as or on, created or used on, or transmitted to or from computer software, including systems and applications software, hard or floppy disks, CD-ROMS, tapes, drives, cells, data processing devices or any other media which are used with electronically controlled equipment.
- 18.** "Suit" means a civil proceeding in which damages because of "bodily injury", "property damage" or "personal and advertising injury" to which this insurance applies are alleged. "Suit" includes:
- a.** An arbitration proceeding in which such damages are claimed and to which the insured must submit or does submit with our consent; or
 - b.** Any other alternative dispute resolution proceeding in which such damages are claimed and to which the insured submits with our consent.
- 19.** "Temporary worker" means a person who is furnished to you to substitute for a permanent "employee" on leave or to meet seasonal or short-term workload conditions.
- 20.** "Volunteer worker" means a person who is not your "employee", and who donates his or her work and acts at the direction of and within the scope of duties determined by you, and is not paid a fee, salary or other compensation by you or anyone else for their work performed for you.
- 21.** "Your product":

a. Means:

- (1)** Any goods or products, other than real property, manufactured, sold, handled, distributed or disposed of by:
 - (a)** You;
 - (b)** Others trading under your name; or
 - (c)** A person or organization whose business or assets you have acquired; and
- (2)** Containers (other than vehicles), materials, parts or equipment furnished in connection with such goods or products.

b. Includes

- (1)** Warranties or representations made at any time with respect to the fitness, quality, durability, performance or use of "your product"; and
- (2)** The providing of or failure to provide warnings or instructions.

c. Does not include vending machines or other property rented to or located for the use of others but not sold.

22. "Your work":

a. Means:

- (1)** Work or operations performed by you or on your behalf; and
- (2)** Materials, parts or equipment furnished in connection with such work or operations.

b. Includes

- (1)** Warranties or representations made at any time with respect to the fitness, quality, durability, performance or use of "your work", and
- (2)** The providing of or failure to provide warnings or instructions.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

NUCLEAR ENERGY LIABILITY EXCLUSION ENDORSEMENT
(Broad Form)

This endorsement modifies insurance provided under the following:

COMMERCIAL AUTOMOBILE COVERAGE PART
COMMERCIAL GENERAL LIABILITY COVERAGE PART
FARM COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE PART
POLLUTION LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART
PROFESSIONAL LIABILITY COVERAGE PART
RAILROAD PROTECTIVE LIABILITY COVERAGE PART
UNDERGROUND STORAGE TANK POLICY

1. The insurance does not apply:

A. Under any Liability Coverage, to "bodily injury" or "property damage":

- (1) With respect to which an "insured" under the policy is also an insured under a nuclear energy liability policy issued by Nuclear Energy Liability Insurance Association, Mutual Atomic Energy Liability Underwriters, Nuclear Insurance Association of Canada or any of their successors, or would be an insured under any such policy but for its termination upon exhaustion of its limit of liability; or
- (2) Resulting from the "hazardous properties" of "nuclear material" and with respect to which (a) any person or organization is required to maintain financial protection pursuant to the Atomic Energy Act of 1954, or any law amendatory thereof, or (b) the "insured" is, or had this policy not been issued would be, entitled to indemnity from the United States of America, or any agency thereof, under any agreement entered into by the United States of America, or any agency thereof, with any person or organization.

B. Under any Medical Payments coverage, to expenses incurred with respect to "bodily injury" resulting from the "hazardous properties" of "nuclear material" and arising out of the operation of a "nuclear facility" by any person or organization.

C. Under any Liability Coverage, to "bodily injury" or "property damage" resulting from "hazardous properties" of "nuclear material", if:

- (1) The "nuclear material" (a) is at any "nuclear facility" owned by, or operated by or on behalf of, an "insured" or (b) has been discharged or dispersed therefrom;
- (2) The "nuclear material" is contained in "spent fuel" or "waste" at any time possessed, handled, used, processed, stored, transported or disposed of, by or on behalf of an "insured"; or
- (3) The "bodily injury" or "property damage" arises out of the furnishing by an "insured" of services, materials, parts or equipment in connection with the planning, construction, maintenance, operation or use of any "nuclear facility", but if such facility is located within the United States of America, its territories or possessions or Canada, this exclusion (3) applies only to "property damage" to such "nuclear facility" and any property thereat.

2. As used in this endorsement:

"Hazardous properties" includes radioactive, toxic or explosive properties.

"Nuclear material" means "source material", "Special nuclear material" or "by-product material".

"Source material", "special nuclear material", and "by-product material" have the meanings given them in the Atomic Energy Act of 1954 or in any law amendatory thereof.

"Spent fuel" means any fuel element or fuel component, solid or liquid, which has been used or exposed to radiation in a "nuclear reactor".

"Waste" means any waste material **(a)** containing "by-product material" other than the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its "source material" content, and **(b)** resulting from the operation by any person or organization of any "nuclear facility" included under the first two paragraphs of the definition of "nuclear facility".

"Nuclear facility" means:

- (a)** Any "nuclear reactor";
- (b)** Any equipment or device designed or used for **(1)** separating the isotopes of uranium or plutonium, **(2)** processing or utilizing "spent fuel", or **(3)** handling, processing or packaging "waste";
- (c)** Any equipment or device used for the processing, fabricating or alloying of "special nuclear material" if at any time the total amount of such material in the custody of the "insured" at the premises where such equipment or device is located consists of or contains more than 25 grams of plutonium or uranium 233 or any combination thereof, or more than 250 grams of uranium 235;
- (d)** Any structure, basin, excavation, premises or place prepared or used for the storage or disposal of "waste";

and includes the site on which any of the foregoing is located, all operations conducted on such site and all premises used for such operations.

"Nuclear reactor" means any apparatus designed or used to sustain nuclear fission in a self-supporting chain reaction or to contain a critical mass of fissionable material.

"Property damage" includes all forms of radioactive contamination of property.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAR LIABILITY EXCLUSION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

A. Exclusion i. under Paragraph 2., Exclusions of Section I – Coverage A – Bodily Injury And Property Damage Liability is replaced by the following:

2. Exclusions

This insurance does not apply to:

i. War

"Bodily injury" or "property damage", however caused, arising, directly or indirectly, out of:

- (1)** War, including undeclared or civil war; or
- (2)** Warlike action by a military force, including action in hindering or defending against an actual or expected attack, by any government, sovereign or other authority using military personnel or other agents; or
- (3)** Insurrection, rebellion, revolution, usurped power, or action taken by governmental authority in hindering or defending against any of these.

B. The following exclusion is added to Paragraph 2., Exclusions of Section I – Coverage B – Personal And Advertising Injury Liability:

2. Exclusions

This insurance does not apply to:

WAR

"Personal and advertising injury", however caused, arising, directly or indirectly, out of:

- a.** War, including undeclared or civil war; or
- b.** Warlike action by a military force, including action in hindering or defending against an actual or expected attack, by any government, sovereign or other authority using military personnel or other agents; or
- c.** Insurrection, rebellion, revolution, usurped power, or action taken by governmental authority in hindering or defending against any of these.

C. Exclusion h. under Paragraph 2., Exclusions of Section I – Coverage C – Medical Payments does not apply. Medical payments due to war are now subject to Exclusion g. of Paragraph 2., Exclusions of Section I – Coverage C – Medical Payments since "bodily injury" arising out of war is now excluded under Coverage A.

QUICK REFERENCE

COMMERCIAL GENERAL LIABILITY COVERAGE PART

READ YOUR POLICY CAREFULLY

The Commercial General Liability Coverage Part in your policy consists of Declarations, a Coverage Form (either CG 00 01 or CG 00 02), Common Policy Conditions and Endorsements, if applicable. Following is a Quick Reference indexing of the principal provisions contained in each of the components making up the Coverage Part, listed in sequential order, except for the provisions in the Declarations which may not be in the sequence shown.

DECLARATIONS

- Named Insured and Mailing Address
- Policy Period
- Description of Business and Location of Premises
- Limits of Insurance
- Forms and Endorsements applying to the Coverage Part at time of issue

COVERAGE FORM (CG 00 01 or CG 00 02)

SECTION I—COVERAGES

- Coverage A—Bodily Injury and Property Damage Liability

- Insuring Agreement

- Exclusions

- Coverage B—Personal and Advertising Injury Liability

- Insuring Agreement

- Exclusions

- Coverage C—Medical Payments

- Insuring Agreement

- Exclusions

- Supplementary Payments

SECTION II—WHO IS AN INSURED

SECTION III—LIMITS OF INSURANCE

SECTION IV—COMMERCIAL GENERAL LIABILITY CONDITIONS

- Bankruptcy

- Duties in the Event of Occurrence, Claim or Suit

- Legal Action Against Us

- Other Insurance

- Premium Audit

- Representations

- Separation of Insureds

- Transfer of Rights of Recovery Against Others to Us

- When We Do Not Renew (applicable to CG 00 02 only)

- Your Right to Claim and "Occurrence" Information (applicable to CG 00 02 only)

SECTION V—EXTENDED REPORTING PERIODS (applicable to CG 00 02 only)

SECTION VI—DEFINITIONS (SECTION V in CG 00 01)

COMMON POLICY CONDITIONS (IL 00 17)

- Cancellation

- Changes

- Examination of Your Books and Records

- Inspections and Surveys

- Premiums

- Transfer of Your Rights and Duties under this Policy

ENDORSEMENTS (If Any)

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

Copyright, Insurance Services Office, Inc., 1982, 1984, 1986.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EMPLOYMENT-RELATED PRACTICES EXCLUSION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

A. The following exclusion is added to Paragraph 2., Exclusions of Section I - Coverage A - Bodily Injury And Property Damage Liability:

This insurance does not apply to:

“Bodily injury” to:

(1) A person arising out of any:

(a) Refusal to employ that person;

(b) Termination of that person’s employment; or

(c) Employment-related practices, policies, acts or omissions, such as coercion, demotion, evaluation, reassignment, discipline, defamation, harassment, humiliation or discrimination directed at that person; or

(2) The spouse, child, parent, brother or sister of that person as a consequence of “bodily injury” to that person at whom any of the employment-related practices described in Paragraphs (a), (b), or (c) above is directed.

This exclusion applies:

(1) Whether the insured may be liable as an employer or in any other capacity; and

(2) To any obligation to share damages with or repay someone else who must pay damages because of the injury.

B. The following exclusion is added to Paragraph 2., Exclusions of Section I - Coverage B - Personal And Advertising Injury Liability:

This insurance does not apply to:

“Personal and advertising injury” to:

(1) A person arising out of any:

(a) Refusal to employ that person;

(b) Termination of that person’s employment; or

(c) Employment-related practices, policies, acts or omissions, such as coercion, demotion, evaluation, reassignment, discipline, defamation, harassment, humiliation or discrimination directed at that person; or

(2) The spouse, child, parent, brother or sister of that person as a consequence of “personal and advertising injury” to that person at whom any of the employment-related practices described in Paragraphs (a), (b), or (c) above is directed.

This exclusion applies:

(1) Whether the insured may be liable as an employer or in any other capacity; and

(2) To any obligation to share damages with or repay someone else who must pay damages because of the injury.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

FUNGI OR BACTERIA EXCLUSION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

A. The following exclusion is added to Paragraph 2., Exclusions of Section I – Coverage A – Bodily Injury And Property Damage Liability:

2. Exclusions

This insurance does not apply to:

Fungi or Bacteria

- a. "Bodily injury" or "property damage" which would not have occurred, in whole or in part, but for the actual, alleged or threatened inhalation of, ingestion of, contact with, exposure to, existence of, or presence of, any "fungi" or bacteria on or within a building or structure, including its contents, regardless of whether any other cause, event, material or product contributed concurrently or in any sequence to such injury or damage.
- b. Any loss, cost or expenses arising out of the abating, testing for, monitoring, cleaning up, removing, containing, treating, detoxifying, neutralizing, remediating or disposing of, or in any way responding to, or assessing the effects of, "fungi" or bacteria, by any insured or by any other person or entity.

This exclusion does not apply to any "fungi" or bacteria that are, are on, or are contained in, a good or product intended for consumption.

B. The following exclusion is added to Paragraph 2., Exclusions of Section I – Coverage B – Personal And Advertising Injury Liability:

2. Exclusions

This insurance does not apply to:

Fungi or Bacteria

- a. "Personal and advertising injury" which would not have taken place, in whole or in part, but for the actual, alleged or threatened inhalation of, ingestion of, contact with, exposure to, existence of, or presence of any "fungi" or bacteria on or within a building or structure, including its contents, regardless of whether any other cause, event, material or product contributed concurrently or in any sequence to such injury.
- b. Any loss, cost or expense arising out of the abating, testing for, monitoring, cleaning up, removing, containing, treating, detoxifying, neutralizing, remediating or disposing of, or in any way responding to, or assessing the effects of, "fungi" or bacteria, by any insured or by any other person or entity.

C. The following definition is added to the Definitions Section:

"Fungi" means any type or form of fungus, including mold or mildew and any mycotoxins, spores, scents or by-products produced or released by fungi.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

CAP ON LOSSES FROM CERTIFIED ACTS OF TERRORISM

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE PART
POLLUTION LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART
RAILROAD PROTECTIVE LIABILITY COVERAGE PART
UNDERGROUND STORAGE TANK POLICY

- A.** If aggregate insured losses attributable to terrorist acts certified under the federal Terrorism Risk Insurance Act exceed \$100 billion in a calendar year and we have met our insurer deductible under the Terrorism Risk Insurance Act, we shall not be liable for the payment of any portion of the amount of such losses that exceeds \$100 billion, and in such case insured losses up to that amount are subject to pro rata allocation in accordance with procedures established by the Secretary of the Treasury.

“Certified act of terrorism” means an act that is certified by the Secretary of the Treasury, in accordance with the provisions of the federal Terrorism Risk Insurance Act, to be an act of terrorism pursuant to such Act. The criteria contained in the Terrorism Risk Insurance Act for a “certified act of terrorism” include the following:

1. The act resulted in insured losses in excess of \$5 million in the aggregate, attributable to all types of insurance subject to the Terrorism Risk Insurance Act; and
 2. The act is a violent act or an act that is dangerous to human life, property or infrastructure and is committed by an individual or individuals as part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the United States Government by coercion.
- B.** The terms and limitations of any terrorism exclusion, or the inapplicability or omission of a terrorism exclusion, do not serve to create coverage for injury or damage that is otherwise excluded under this Coverage Part.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**EXCLUSION OF PUNITIVE DAMAGES
RELATED TO A CERTIFIED ACT OF TERRORISM**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE PART
POLLUTION LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART
RAILROAD PROTECTIVE LIABILITY COVERAGE PART
UNDERGROUND STORAGE TANK POLICY

A. The following exclusion is added:

This insurance does not apply to:

TERRORISM PUNITIVE DAMAGES

Damages arising, directly or indirectly, out of a “certified act of terrorism” that are awarded as punitive damages.

B. The following definition is added:

“Certified act of terrorism” means an act that is certified by the Secretary of the Treasury, in accordance with the provisions of the federal Terrorism Risk Insurance Act, to be an act of terrorism pursuant to such Act. The criteria contained in the Terrorism Risk Insurance Act for a “certified act of terrorism” include the following:

1. The act resulted in insured losses in excess of \$5 million in the aggregate, attributable to all types of insurance subject to the Terrorism Risk Insurance Act; and
2. The act is a violent act or an act that is dangerous to human life, property or infrastructure and is committed by an individual or individuals as part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the United States Government by coercion.

C. The terms and limitations of any terrorism exclusion, or the inapplicability or omission of a terrorism exclusion, do not serve to create coverage for injury or damage that is otherwise excluded under this Coverage Part.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

CORPORAL PUNISHMENT

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

Exclusion **a.** of paragraph **2.**, Exclusions of COVERAGE A—BODILY INJURY AND PROPERTY DAMAGE LIABILITY (Section I—Coverages) is replaced by the following:

This insurance does not apply to:

a. “Bodily injury” or “property damage” expected or intended from the standpoint of the insured.

This exclusion does not apply to “bodily injury” resulting from:

- (1)** The use of reasonable force to protect persons or property; or
- (2)** Corporal punishment to your student administered by or at the direction of any insured.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

CAP ON LOSSES FROM CERTIFIED ACTS OF TERRORISM

This endorsement modifies insurance provided under the following:

DIRECTORS AND OFFICERS LIABILITY COVERAGE PART (CONDOMINIUM ASSOCIATIONS AND HOMEOWNERS ASSOCIATIONS)

DIRECTORS AND OFFICERS LIABILITY COVERAGE PART

EMPLOYEE BENEFITS LIABILITY COVERAGE PART

EMPLOYMENT PRACTICES LIABILITY COVERAGE PART

LIMITED POLLUTION LIABILITY COVERAGE PART – DESIGNATED STORAGE TANKS

RELIGIOUS ORGANIZATIONS DIRECTORS AND OFFICERS LIABILITY COVERAGE PART

SCHOOL LEADERS ERRORS AND OMISSIONS COVERAGE PART

SEXUAL MISCONDUCT AND MOLESTATION LIABILITY COVERAGE PART

- A. If aggregate insured losses attributable to terrorist acts certified under the federal Terrorism Risk Insurance Act exceed \$100 billion in a calendar year and we have met our insurer deductible under the Terrorism Risk Insurance Act, we shall not be liable for the payment of any portion of the amount of such losses that exceeds \$100 billion, and in such case insured losses up to that amount are subject to a pro rata allocation in accordance with procedures established by the Secretary of the Treasury.

“Certified act of terrorism” means an act that is certified by the Secretary of the Treasury, in accordance with the provisions of the federal Terrorism Risk Insurance Act, to be an act of terrorism pursuant to such Act. The criteria contained in the Terrorism Risk Insurance Act for a “certified act of terrorism” include the following:

1. The act resulted in insured losses in excess of \$5 million in the aggregate, attributable to all types of insurance subject to the Terrorism Risk Insurance Act; and
 2. The act is a violent act or an act that is dangerous to human life, property or infrastructure and is committed by an individual or individuals as part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the United States Government by coercion.
- B. The terms and limitations of any terrorism exclusion, or the inapplicability or omission of a terrorism exclusion, do not serve to create coverage for any injury, damage, damages, claims, suits, wrongful acts, losses or employment practices that are otherwise excluded under this Coverage Part.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**EXCLUSION OF PUNITIVE DAMAGES RELATED TO
A CERTIFIED ACT OF TERRORISM**

This endorsement modifies insurance provided under the following:

DIRECTORS AND OFFICERS LIABILITY COVERAGE PART (CONDOMINIUM ASSOCIATIONS AND HOMEOWNERS ASSOCIATIONS)
DIRECTORS AND OFFICERS LIABILITY COVERAGE PART
EMPLOYEE BENEFITS LIABILITY COVERAGE PART
EMPLOYMENT PRACTICES LIABILITY COVERAGE PART
LIMITED POLLUTION LIABILITY COVERAGE PART – DESIGNATED STORAGE TANKS
RELIGIOUS ORGANIZATIONS DIRECTORS AND OFFICERS LIABILITY COVERAGE PART
SCHOOL LEADERS ERRORS AND OMISSIONS COVERAGE PART
SEXUAL MISCONDUCT AND MOLESTATION LIABILITY COVERAGE PART

A. The following exclusion is added:

This insurance does not apply to:

TERRORISM PUNITIVE DAMAGES

Damages arising, directly or indirectly, out of a “certified act of terrorism” that are awarded as punitive damages.

B. The following definition is added:

“Certified act of terrorism” means an act that is certified by the Secretary of the Treasury, in accordance with the provisions of the federal Terrorism Risk Insurance Act, to be an act of terrorism pursuant to such Act. The criteria contained in the Terrorism Risk Insurance Act for a “certified act of terrorism” include the following:

1. The act resulted in insured losses in excess of \$5 million in the aggregate, attributable to all types of insurance subject to the Terrorism Risk Insurance Act; and
2. The act is a violent act or an act that is dangerous to human life, property or infrastructure and is committed by an individual or individuals as part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the United States Government by coercion.

C. The terms and limitations of any terrorism exclusion, or the inapplicability or omission of a terrorism exclusion, do not serve to create coverage for any injury, damage, damages, claims, suits, wrongful acts, losses or employment practices that are otherwise excluded under this Coverage Part.

RECORDING AND DISTRIBUTION OF MATERIAL OR INFORMATION IN VIOLATION OF LAW EXCLUSION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

- A. The following exclusion is added to Paragraph 2. **Exclusions of Section I – Coverage A – Bodily Injury And Property Damage Liability:**

2. Exclusions

This insurance does not apply to:

Recording And Distribution Of Material Or Information In Violation Of Law

“Bodily injury” or “property damage” arising directly or indirectly out of any action or omission that violates or is alleged to violate:

- (1) The Telephone Consumer Protection Act (TCPA), including any amendment of or addition to such law;
- (2) The CAN-SPAM Act of 2003, including any amendment of or addition to such law;
- (3) The Fair Credit Reporting Act (FCRA), and any amendment of or addition to such law, including the Fair and Accurate Credit Transaction Act (FACTA); or
- (4) Any federal, state or local statute, ordinance or regulation, other than the TCPA, CAN-SPAM Act of 2003 or FCRA and their amendments and additions, that addresses, prohibits, or limits the printing, dissemination, disposal, collecting, recording, sending, transmitting, communicating or distribution of material or information.

- B. The following exclusion is added to Paragraph 2. **Exclusions of Section I – Coverage B – Personal And Advertising Injury Liability** is replaced by the following:

2. Exclusions

This insurance does not apply to:

Recording And Distribution Of Material Or Information In Violation Of Law

“Personal and advertising injury” arising directly or indirectly out of any action or omission that violates or is alleged to violate:

- (1) The Telephone Consumer Protection Act (TCPA), including any amendment of or addition to such law;
- (2) The CAN-SPAM Act of 2003, including any amendment of or addition to such law;
- (3) The Fair Credit Reporting Act (FCRA), and any amendment of or addition to such law, including the Fair and Accurate Credit Transaction Act (FACTA); or
- (4) Any federal, state or local statute, ordinance or regulation, other than the TCPA, CAN-SPAM Act of 2003 or FCRA and their amendments and additions, that addresses, prohibits, or limits the printing, dissemination, disposal, collecting, recording, sending, transmitting, communicating or distribution of material or information.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION – TRAMPOLINES

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

The following is added to paragraph 2. **Exclusions** of **COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY** under **SECTION I – COVERAGES**:

This insurance does not apply to:

Trampolines

“Bodily injury” or “property damage” arising out of the ownership, operation, maintenance or use of any:

(1) Trampoline; or

(2) Trampoline apparatus, device or accessory;

including the rendering of or failure to render instructions, recommendations, warnings or advice.

However, this exclusion does not apply to any trampoline that is 60 inches or less in diameter.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION – CLIMBING OR RAPPELLING WALLS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

The following is added to paragraph **2. Exclusions** of **COVERAGE A BODILY INJURY AND PROPERTY DAMAGE** under **SECTION I – COVERAGES**:

This insurance does not apply to:

Climbing Or Rappelling Walls

“Bodily injury” or “property damage” arising out of the ownership, operation, maintenance or use of any:

- (1)** Climbing or rappelling wall, tower or boulder; or
- (2)** Climbing or rappelling apparatus, device or accessory;


including the rendering of or failure to render instructions, recommendations, warnings or advice.

The term Company, as used below, means the company that has issued the policy to which this witness statement is attached. The Company is identified on your Declarations in the area titled "Coverage is provided in".

IN WITNESS WHEREOF, the Company has caused this policy to be executed and attested on its behalf by its President and Secretary at Boston, Massachusetts, and countersigned on the Declarations by a duly authorized representative of that Company. In a state where a countersignature is not required, no policy shall be deemed invalid due to the absence of a countersignature.



President



Secretary

Policy Number: CBP 8526587		Prior Policy:	
Policy Period: 11/16/2020 To: 11/16/2021 12:01 am Standard Time at the Mailing Address of the Named Insured			
Coverage Is Provided In THE NETHERLANDS INSURANCE COMPANY-A STOCK COMPANY			
Billing Type: AGENCY BILL - PREPAID			
Named Insured and Mailing Address: ACADEMY OF DOVER 104-106 SALISBURY ROAD DOVER DE 19904		Agent: L & W INSURANCE PO BOX 918 DOVER DE 19903-0918 Agent Code: 5290824 Agent Phone: (302)-674-3500	

Reason for Amendment: NEW BUSINESS

Transaction Effective Date: 11/16/2020

Premium for this Transaction: \$ 17,287.00

STATEMENT OF ACCOUNT

Acct Date	Premium	Surcharge/ Assessment	Total Due
11/2020	\$ 17,287.00	\$ 0.00	\$ 17,287.00
		Total Premium Charged:	\$ 17,287.00

Date Issued: 11/19/2020

Appendix 10 - ERIP Reporting SY18/19 and SY19/20

Academy of Dover Charter

Principal/Designee Emergency Planning Survey

November 6, 2020

By: Shalane Baldwin

49 questions

49 answered

100% complete

Table of Contents

Summary	1
Checklist	2
<i>Preparedness</i>	2
<i>Mitigation</i>	4
<i>Emergency Response</i>	5
<i>Recovery</i>	7

Summary

Checklist

Preparedness

Have you identified a team of leaders in your school community who will assist in your emergency planning efforts?

[Yes](#) 'No' 'In process' 'N/S'

Are you, your teachers and your staff aware of what roles and responsibilities they have under the plan?

[Yes](#) 'No' 'In process' 'N/S'

Does your plan incorporate the principles of NIMS (National Incident Management System) as required?

[Yes](#) 'No' 'In process' 'N/S'

Is your staff trained to perform the responsibilities under NIMS?

[Yes](#) 'No' 'In process' 'N/S'

Have you had drills and exercises that involve the performance of SEMS/NIMS duties?

[Yes](#) 'No' 'In process' 'N/S'

Have you conducted an inventory of the kinds of skills or needs of your staff?

[Yes](#) 'No' 'In process' 'N/S'

Have you trained your staff in CPR, basic First Aid, and damage assessment?

[Yes](#) 'No' 'In process' 'N/S'

Selected staff trained.

Shalane Baldwin

11/06/2020 15:26

Does your staff know the location and have maps of the facility showing the main gas, electricity, water shut-off valves and other hazards?

[Yes](#) 'No' 'In process' 'N/S'

Have you made a list and map of the locations of first aid and emergency supplies and made sure the items are restocked on a regular basis?

[Yes](#) 'No' 'In process' 'N/S'

Does your site have sufficient supplies (water, food, blankets) to handle emergency situations that may last up to three days?

[Yes](#) 'No' 'In process' 'N/S'

Is everyone aware of primary evacuation routes and alternate routes? Do your drills include using alternative routes?

[Yes](#) 'No' 'In process' 'N/S'

Have bookshelves, file cabinets, free-standing bookcases, aquariums, etc. been bolted to the wall or arranged to support each other?

[Yes](#) 'No' 'In process' 'N/S'

Have bookshelves, file cabinets, free-standing bookcases, aquariums, etc. been bolted to the wall or arranged to support each other?

[Yes](#) 'No' 'In process' 'N/S'

Mitigation

Have bookshelves, file cabinets, free-standing bookcases, aquariums, etc. been bolted to the wall or arranged to support each other?

[Yes](#) 'No' 'In process' 'N/S'

Have bookshelves, file cabinets, free-standing bookcases, aquariums, etc. been bolted to the wall or arranged to support each other?

[Yes](#) 'No' 'In process' 'N/S'

Have heavy items been removed from the tops of bookshelves and cabinets?

[Yes](#) 'No' 'In process' 'N/S'

Have windows in classrooms and other campus buildings been equipped with safety glass or covered with protective film?

[Yes](#) 'No' 'In process' 'N/S'

Are partitions, suspended ceilings, overhead lights and air ducts secured to the structure of the building?

[Yes](#) 'No' 'In process' 'N/S'

Are televisions mounted and secured properly in classrooms?

[Yes](#) 'No' 'In process' 'N/S'

Have you evaluated exits in classrooms, multipurpose rooms and offices to ensure they will remain clear for evacuation routes in an emergency?

[Yes](#) 'No' 'In process' 'N/S'

Have inventories been made of hazardous materials throughout your schools and facilities?

[Yes](#) 'No' 'In process' 'N/S'

Are hazardous materials identified, separated and stored properly?

[Yes](#) 'No' 'In process' 'N/S'

Are there any programs established between the district, agencies and community groups that discuss the school district's policies regarding student release and retention and the development of family preparedness plans?

[Yes](#) 'No' 'In process' 'N/S'

How and where are you storing vital data, plans and records? Do you have duplicate copies of important documents stored in an off-site location?

[Yes](#) 'No' 'In process' 'N/S'

Emergency Response

Does your district have a policy requiring the use of NIMS?

[Yes](#) 'No' 'In process' 'N/S'

Has your administration clearly communicated Emergency Operations policy and performance expectation to all staff?

[Yes](#) 'No' 'In process' 'N/S'

Has your district incorporated the principles of NIMS in its plan, emergency response procedures and training materials?

[Yes](#) 'No' 'In process' 'N/S'

Are the school site plans coordinated with the district's plan?

[Yes](#) 'No' 'In process' 'N/S'

Has your staff been trained in NIMS and do they understand the basic principles as required?

[Yes](#) 'No' 'In process' 'N/S'

Has your staff been trained in how to perform any functions to which they may be assigned during a declared disaster?

[Yes](#) 'No' 'In process' 'N/S'

Does your school district have an arrangement with structural engineers who will report to the campus directly after a disaster to evaluate the facilities?

[Yes](#) 'No' 'In process' 'N/S'

Do you have arrangements in place with local vendors to provide services, fuel for generators, and materials to support recovery efforts?

'Yes' 'No' [In process](#) 'N/S'

Have you identified an evacuation site? Is there an alternate location if your original site is not useable?

[Yes](#) 'No' 'In process' 'N/S'

Have you determined how to transport students to an alternate location if necessary?

[Yes](#) 'No' 'In process' 'N/S'

Do you know if your school has been designated as a potential mass care shelter?

[Yes](#) 'No' 'In process' 'N/S'

Do you have a Memorandum of Understanding with public health agencies or with the American Red Cross?

'Yes' 'No' [In process](#) 'N/S'

Do you know what to do with seriously injured students?

[Yes](#) 'No' 'In process' 'N/S'

Does your school have clearly established student tracking procedures?

[Yes](#) 'No' 'In process' 'N/S'

Have you developed emergency sanitation procedures?

[Yes](#) 'No' 'In process' 'N/S'

Have you determined who will serve as the Public Information Officer to provide information to the media after a disaster, and is that person properly trained in accordance with NIMS?

[Yes](#) 'No' 'In process' 'N/S'

Have you identified personnel who can translate information to non-English speaking parents or guardians?

[Yes](#) 'No' 'In process' 'N/S'

Has a central Emergency Operations Center (EOC), "command post" or other central planning area been identified?

[Yes](#) 'No' 'In process' 'N/S'

Has the EOC been equipped with maps of the campus, facilities and hazards in the area, a student roster for the current year, first aid supplies and other tools necessary to manage the emergency response after a disaster?

[Yes](#) 'No' 'In process' 'N/S'

Does your campus have an internal communication system such as walkietalkies, bullhorn and/or public address system?

[Yes](#) 'No' 'In process' 'N/S'

Recovery

Have you Identified record keeping requirements and sources of financial aid for disaster relief?

- [Yes](#) 'No' 'In process' 'N/S'

Is someone designated to determine if buildings are safe after an event?

- [Yes](#) 'No' 'In process' 'N/S'

Do you have an established absentee policy for staff and students after a disaster?

- [Yes](#) 'No' 'In process' 'N/S'

Do you have an established agreement with mental health professionals to provide counseling to students and their families after the disaster?

- [Yes](#) 'No' 'In process' 'N/S'

Are there established alternative teaching methods for students unable to return immediately to classes: correspondence classes, tele-teaching, group tutoring, on-line teaching, etc?

- [Yes](#) 'No' 'In process' 'N/S'

Is there a plan for conducting classes if some of the school facilities are damaged - half-day sessions, alternative sites, portable classrooms?

- [Yes](#) 'No' 'In process' 'N/S'

Are you familiar with the procedures involved, and forms used in claiming disaster assistance from the state and federal governments? Work with your local or state emergency services professionals to maximize your cost-recovery abilities.

- [Yes](#) 'No' 'In process' 'N/S'

Appendix 11 - Summary of Findings from Independent Audits

ACADEMY OF CHARTER SCHOOLS
DRAFT - FOR DISCUSSION PURPOSES ONLY
 SCHEDULE OF FINDINGS AND RECOMMENDATIONS

PART A - SUMMARY OF AUDITOR'S RESULTS

Financial Statements

Type of auditor's report issued [unmodified, qualified, adverse, or disclaimer]:

Unmodified

Internal control over financial reporting:

- Material weakness(es) identified? _____ Yes X No
- Significant deficiency(ies) identified? _____ Yes X None reported
- Noncompliance material to financial statements noted? _____ Yes X No

Federal Awards

Internal control over major programs:

- Material weakness(es) identified? _____ Yes X No
- Significant deficiency(ies) identified? _____ Yes X None reported

Type of auditor's report issued on compliance for major programs [unmodified, qualified, adverse, or disclaimer]:

Unmodified

Any audit findings disclosed that are required to be reported in accordance under the Uniform Guidance?

_____ Yes X No

Identification of major programs:

CFDA Numbers

Name of Federal Program or Cluster

84.282

Charter Schools Program Grants
Education Stabilization Fund Under The
Coronavirus Aid, Relief, and Economic
Security Act

84.425

Dollar threshold used to distinguish between Type A and Type B programs:

\$750,000

Auditee qualified as low-risk auditee?

_____ Yes X No

**Appendix 12 - Final Fiscal Year 2020 Revenue and Expenditure Budget
Report**

Academy of Dover Charter School
Web Funding Report: June Finances Presented at July Board Meeting

FY	APPR	STATE FUNDS	FY21 Budget	Receipt to Date	% Received	Anticipated Receipts
20	05309	SSBG-K to 3	\$ 3,517.44	\$ 3,517.44	100%	\$ -
20	05310	SSBG- Reading	\$ 13,876.09	\$ 13,876.09	100%	\$ -
20	08914	Opportunity Fund-General	\$ 31,200.35	\$ 31,200.35	100%	\$ -
20	08915	Opportunity Fund-Mental Health and Reading	\$ 27,836.00	\$ 27,836.00	100%	\$ -
20	59970	School Safety and Security	\$ 5,355.39	\$ 5,355.39	100%	\$ -
20	05213	Operations	\$ 1,533.60	\$ 1,533.60	100%	\$ -
21	05149	Homeless Transportation	\$ 1,350.00	\$ 1,350.00	100%	\$ -
21	05177	Charter Transportation	\$ 319,739.27	\$ 319,739.27	100%	\$ -
21	05213	Operations	\$ 2,699,329.00	\$ 2,643,508.35	98%	\$ 55,820.65
21	05235	Technology Block Grant	\$ 8,534.97	\$ 8,534.97	100%	\$ -
21	05289	Educational Sustainment	\$ 64,711.00	\$ 64,711.00	100%	\$ -
21	05297	Educational Opportunity	\$ 30,296.00	\$ 30,296.00	100%	\$ -
21	05309	SSBG-K to 3	\$ 12,461.00	\$ 12,461.00	100%	\$ -
21	05310	SSBG- Reading	\$ 81,067.00	\$ 81,067.00	100%	\$ -
21	05311	Opportunity Fund-Mental Health and Reading	\$ 27,836.00	\$ 27,836.00	100%	\$ -
21	05317	Child Safety	\$ 532.00	\$ 532.00	100%	\$ -
21	50022	MCI	\$ 38,057.00	\$ 38,057.00	100%	\$ -
Total State Funds			\$ 3,384,977.84	\$ 3,329,157.19	98.4%	\$ 55,820.65
20	91100	Food Service Carryover	\$ 72,691.46	\$ 72,691.46	100%	\$ -
20	98000	Local Funds Carryover	\$ 275,253.36	\$ 275,253.36	100%	\$ -
21	91100	Food Service	\$ 122,529.71	\$ 122,529.71	100%	\$ -
21	91200	Stipend Reimbursement	\$ 390.76	\$ 390.76	100%	\$ -
21	98000	Local Funds	\$ 501,209.22	\$ 501,209.22	100%	\$ -
21	98041	Cost Recovery	\$ 10,240.10	\$ 10,240.10	100%	\$ -
21	98139	Before and After Care	\$ 64.06	\$ 64.06	100%	\$ -
21	98159	Donations	\$ 25,922.91	\$ 29,022.91	112%	\$ (3,100.00)
21	98220	Fundraising	\$ 3,862.00	\$ 3,862.00	100%	\$ -
21	98230	School Account	\$ 3,785.69	\$ 3,856.79	102%	\$ (71.10)
21	98231	School Activities	\$ 1,386.95	\$ 1,472.98	106%	\$ (86.03)
21	99150	EXC-CSD Settlement	\$ 269.39	\$ 269.39	100%	\$ -
Total Local Funds			\$ 1,017,605.61	\$ 1,020,593.35	100.3%	\$ (3,257.13)
19	40532	Title IV	\$ 16,261.25	\$ 16,261.25	100%	\$ -
19	40565	IDEA C	\$ 626.00	\$ 626.00	100%	\$ -
20	40114	Title II	\$ 27,638.60	\$ 27,638.60	100%	\$ -
20	40532	Title IV	\$ 21,459.00	\$ 21,459.00	100%	\$ -
20	40554	Title I	\$ 23,753.29	\$ 23,753.29	100%	\$ -
20	40564	IDEA B	\$ 17,179.12	\$ 17,179.12	100%	\$ -
20	40565	IDEA C	\$ 2,272.00	\$ 2,272.00	100%	\$ -
20	40730	CARES Act	\$ 205,895.00	\$ 205,895.00	100%	\$ -
21	40114	Title II	\$ 31,993.00	\$ 39,375.00	123%	\$ (7,382.00)
21	40532	Title IV	\$ 22,058.00	\$ 22,142.00	100%	\$ (84.00)
21	40554	Title I	\$ 210,231.00	\$ 210,231.00	100%	\$ -
21	40564	IDEA B	\$ 69,907.00	\$ 84,052.00	120%	\$ (14,145.00)
21	40565	IDEA C	\$ 2,568.00	\$ 2,568.00	100%	\$ -
21	40954	Charter Expansion Grant Funds	\$ 750,000.00	\$ 750,000.00	100%	\$ -
21	40730	ESSERS II	\$ 638,924.00	\$ 638,924.00	100%	\$ -
21	40820	COVID School Emerg Relief Fund	\$ 1,541,286.00	\$ 1,027,524.00	67%	\$ -
Total FEDERAL Funds			\$ 3,582,051.26	\$ 3,089,900.26	86.3%	\$ (21,611.00)
ALL FUNDS Total			\$ 7,984,634.71	\$ 7,439,650.80	93.2%	\$ 30,952.52

	Operating Budget Description	Board Approved Budget	Encumbered	Expenditures	Balance	% Expended
1	Salaries and Benefits	\$ 2,683,345.43		\$ 2,683,345.43	\$ -	100.0%
2	Utilities	\$ 43,702.66		\$ 43,702.66	\$ -	100.0%
3	Facility--Lease	\$ 565,195.00		\$ 559,501.00	\$ 5,694.00	99.0%
4	Facility--Mortgage			\$ -	\$ -	
5	Transportation	\$ 281,311.77		\$ 288,524.96	\$ (7,213.19)	102.6%
7	Contractor--Food Service	\$ 63,521.12		\$ 63,521.12	\$ -	100.0%
8	Management Company			\$ -	\$ -	
9	Textbooks and Instructional Supplies	\$ 156,601.67		\$ 156,601.67	\$ -	100.0%
10	Building Maintenance and Custodial Services	\$ 88,883.35		\$ 88,883.35	\$ -	100.0%
12	Other Expenses	\$ 295,770.43		\$ 295,770.43	\$ -	100.0%
13	Contingency	\$ 3,804,784.09		\$ -	\$ 3,804,784.09	0.0%
14	Unallocated	\$ -		\$ -	\$ -	
Total Operating Budget		\$ 7,983,115.52	\$ 68,621.77	\$ 4,179,850.62	\$ 3,734,643.13	53.2%

The projected payroll accrual for the summer of 2020 was \$347,907.47 and the accounts payable amounted to \$8192.04

Appendix 13 - Approved Preliminary Fiscal Year 2021 Budget

Academy of Dover Charter School
Web Funding Report: Aug Finances Presented at Sept Board Meeting

FY	APPR	STATE FUNDS	FY22 Budget	Receipt to Date	% Received	Anticipated Receipts
22	05149	Homeless Transportation	\$ 675.00	\$ 675.00	100%	\$ -
22	05177	Charter Transportation	\$ 312,885.00	\$ 312,885.00	100%	\$ -
22	05213	Operations	\$ 2,762,619.00	\$ 2,541,529.00	92%	\$ 221,090.00
22	05235	Technology Block Grant	\$ 7,794.00	\$ 7,794.00	100%	\$ -
22	05289	Ed Sustainment	\$ 58,240.00	\$ 58,240.00	100%	\$ -
22	05297	Ed Opportunity Grant	\$ 47,419.00	\$ 47,419.00	100%	\$ -
22	05311	Opp Fund: Mental Health/Reading	\$ 27,030.00	\$ 27,030.00	100%	\$ -
22	05317	Child Safety Awareness	\$ 532.00	\$ 532.00	100%	\$ -
22	05389	Sub Reimbursement: Family Leave	\$ -	\$ -		\$ -
21	05177	Charter Transportation	\$ 24,570.29	\$ 24,570.29	100%	\$ -
21	05318	Charter Transportation Surplus	\$ 17,745.00	\$ 17,745.00	100%	\$ -
21	00607	Operations	\$ 55,820.65	\$ -	0%	\$ 55,820.65
Total State Funds			\$ 3,315,329.94	3,038,419.29	91.6%	\$ 276,910.65
22	91100	Cafeteria	\$ 125,000.00	\$ 58,423.38	47%	\$ -
22	91200	Stipend Reimbursement	\$ 390.76	\$ 390.76	100%	\$ -
22	98000	Local Funds	\$ 1,246,462.58	\$ 776,462.58	62%	\$ 470,000.00
22	98041	CSCRCP	\$ 10,240.00	\$ 10,240.00	100%	\$ -
22	98139	Before and After Care	\$ 64.06	\$ 64.06	100%	\$ -
22	98159	Donations	\$ 29,022.91	\$ 29,022.91	100%	\$ -
22	98220	Fundraising	\$ 3,599.30	\$ 3,599.30	100%	\$ -
22	98230	School Account	\$ 3,856.79	\$ 3,856.79	100%	\$ -
22	98231	School Activities	\$ 1,081.74	\$ 1,081.74	100%	\$ -
21	99150	Exc - CSD Settlement	\$ 269.39	\$ 269.39	100%	\$ -
Total Local Funds			\$ 1,419,987.53	883,410.91	62.2%	\$ 470,000.00
20	40114	Title II: Prof Development	\$ 34,023.00	\$ 34,023.00	100%	\$ -
21	40554	Title I	\$ 50,195.04	\$ 50,195.04	100%	\$ -
21	40564	IDEA B	\$ 28,851.20	\$ 28,851.20	100%	\$ -
21	40730	School Emergency Relief Fund	\$ 638,924.00	\$ 638,924.00	100%	\$ -
21	40820	ARP Covid School Emg Rlf Fund	\$ 1,541,286.00	\$ 1,541,286.00	100%	\$ -
21	40954	DE Charter Expansion	\$ 574,573.82	\$ 574,573.82	100%	\$ -
21	50022	MCI	\$ 38,057.00	\$ 38,057.00	100%	\$ -
22	50022	MCI	\$ 52,681.00	\$ 52,681.00	100%	\$ -
Total FEDERAL Funds			\$ 2,958,591.06	\$ 2,958,591.06	100.0%	\$ -
ALL FUNDS Total			\$ 7,693,908.53	\$ 6,880,421.26	89.4%	\$ 746,910.65

	Operating Budget Description	Board Approved Budget	Expenditures	Balance	% Expended
1	Salaries and Benefits	\$ 3,680,953.23	\$ 566,240.02	\$ 3,114,713.21	15.4%
2	Utilities	\$ 49,700.00	\$ 8,077.32	\$ 41,622.68	16.3%
3	Facility--Lease	\$ 612,560.00	\$ 94,900.00	\$ 517,660.00	15.5%
4	Facility--Mortgage		\$ -	\$ -	
5	Transportation	\$ 325,000.00	\$ 21,507.94	\$ 303,492.06	6.6%
7	Contractor--Food Service	\$ 75,000.00	\$ 8,945.47	\$ 66,054.53	11.9%
8	Management Company		\$ -	\$ -	
9	Textbooks and Instructional Supplies	\$ 287,841.94	\$ 60,995.35	\$ 226,846.59	21.2%
10	Building Maintenance and Custodial Services	\$ 143,500.00	\$ 36,637.26	\$ 106,862.74	25.5%
12	Other Expenses	\$ 476,050.00	\$ 98,304.54	\$ 377,745.46	20.7%
13	Contingency	\$ 1,475,000.00	\$ -	\$ 1,475,000.00	0.0%
14	Unallocated	\$ 568,303.36	\$ -	\$ 568,303.36	
Total Operating Budget		\$ 7,693,908.53	\$ 895,607.90	\$ 6,798,300.63	11.6%

The projected payroll accrual for the summer of 2021 was \$314,919.55 and the accounts payable amounted to \$121,068.76

Appendix 14 - Fiscal Year 2020 Audited Financial Statements (Updated)

Appendix 15 - List of all settlements (if applicable)

The Academy of Dover has not had any Due Process settlements.

From: [Davis James](#)
To: [Marinucci Michele](#)
Subject: Fw: Annual Fire and Life Safety Inspection
Date: Tuesday, September 28, 2021 1:16:57 PM
Attachments: [Outlook-ietz20rk.png](#)

Mr. Jimmie Davis , Chief Custodian



Academy of Dover Charter School
Dover, DE 19904
james.davis@aod.k12.de.us
(302) 674-0684 ext. 158

From: City of Dover Fire Marshal <noreply+db02c1d91b09ae3b@formstack.com>
Sent: Tuesday, July 20, 2021 9:48 AM
To: Davis James <James.Davis@aod.k12.de.us>
Subject: Annual Fire and Life Safety Inspection



**Formstack Submission For: CITY OF DOVER FIRE
MARSHAL ANNUAL FIRE AND LIFE SAFETY
INSPECTION**

Submitted at 07/20/21 9:48 AM

DATE/TIME OF INSPECTION:	Jul 20, 2021 09:16 AM
FIRE MARSHAL CONDUCTING INSPECTION:	PHILLIP LEWIS
FIRE MARSHAL EMAIL:	plewis@dover.de.us

BUSINESS NAME:	Academy of Dover
OCCUPANCY:	EDUCATIONAL
RESPONSIBLE PERSON:	Jimmy Davis
RESPONSIBLE PERSON EMAIL:	james.davis@aod.k12.de.us
LOCATION ADDRESS:	104 Saulsbury Rd Dover, DE 19904
RESPONSIBLE PERSON PHONE NUMBER:	(302) 241-5116
DOES THIS SITE HAVE ANY OF THE FOLLOWING? (CHECK ALL THAT APPLY):	FIRE ALARM SYSTEM FIRE SUPPRESSION SYSTEM KITCHEN HOOD HOOD SUPPRESSION SYSTEM
ANNUAL FIRE ALARM INSPECTION DATE:	Jul 2021
FIRE ALARM INSPECTION AGENCY:	B-SAFE
ANNUAL SPRINKLER INSPECTION:	Jun 2021
FIRE SUPPRESSION INSPECTION AGENCY (SPRINKLER):	OTHER
ELECTRICAL INSPECTION AGENCY:	FIRST STATE INSPECTION AGENCY
ELECTRICAL INSPECTION:	Nov 01, 2015
HOOD SUPPRESSION SYSTEM INSPECTION:	Feb 2021
HOOD SUPPRESSION INSPECTION AGENCY:	FIRST STATE FIRE INSPECTION AGENCY

**AUTHORIZED AGENCY
(HOOD/DUCT
CLEANING):**

First state fire service

**ANNUAL FIRE
EXTINGUISHER
INSPECTION:**

Aug 2020

**FIRE EXTINGUISHER
INSPECTION AGENCY:**

FIRST STATE FIRE
PROTECTION

OTHER:

MONTHLY FIRE DRILLS = NOT
APPLICABLE
MONTHLY GENERATOR TEST
= NOT APPLICABLE

LICENSES:

CITY OF DOVER BUSINESS
LICENSE = NOT APPLICABLE
CITY OF DOVER PUBLIC
OCCUPANCY = LICENSE IS UP
TO DATE
STATE OF DELAWARE CHILD
CARE LICENSING = NOT
APPLICABLE
STATE OF DELAWARE
PROFESSIONAL REGULATION
LICENSE = NOT APPLICABLE
STATE OF DELAWARE PUBLIC
HEALTH = NOT APPLICABLE

EXTERIOR:

IS THE STREET ADDRESS
POSTED? = YES
ARE FIRE LANES PROPERLY
MARKED? = YES
IS THE PAINT OR SIGNAGE
FOR THE FIRE LANE IN GOOD
CONDITION? = YES
IS THE FIRE DEPARTMENT
CONNECTION SIGNAGE
LEGIBLE? = YES
IS THE FIRE DEPARTMENT
CONNECTION ACCESSIBLE? =
YES
IS THERE SPRINKLER
PROTECTION UNDER
OVERHANGS? = NOT
APPLICABLE
IS THE EXTERIOR SPRINKLER
ROOM LABELED? = YES

IS THERE IMPACT PROTECTION? = YES
ARE THE FIRE HYDRANTS ON THE PROPERTY FREE OF OBSTRUCTIONS? = YES
IS THERE A KNOX BOX? = YES
ARE THE KNOX BOX KEYS UP TO DATE? = YES

SPRINKLER SYSTEM DETAILS:

IS THERE 36 INCH CLEARANCE TO THE RISER? = YES
ARE THE CONTROL VALVES OPEN AND SECURED? = YES
IS THERE AT LEAST 18 INCHES OF CLEARANCE FROM HEADS TO ANY OBSTRUCTIONS? = YES
ARE THE SPRINKLER HEADS FREE OF DUST, CORROSION, AND PAINT? = YES
DO ANY ESCUTCHEONS NEED REPLACEMENT? = NO
IS THE INTERIOR SPRINKLER ROOM LABELED? = NOT APPLICABLE

MEANS OF EGRESS:

DO FIRE RATED DOORS SELF CLOSE? = YES
DO FIRE RATED DOORS POSITIVELY LATCH? = YES
DO EXIT DOORS HAVE PROPERLY INSTALLED PANIC HARDWARE? = YES
IS THE MEANS OF EGRESS FREE FROM OBSTRUCTIONS? = YES
IS THE EXIT ACCESS (LEADING TO THE EXIT) UNOBSTRUCTED? = YES
IS THE EXIT (DOOR) UNOBSTRUCTED? = YES
IS THE EXIT DISCHARGE (FROM THE EXIT TO THE PUBLIC WAY) UNOBSTRUCTED? = YES
IS THERE STORAGE IN ANY UNAUTHORIZED AREAS? = NO
ARE THE FLOORS NUMBERED PROPERLY? = NOT

APPLICABLE

ELECTRICAL/LIGHTING:

DO ALL EXIT LIGHTS WORK?
= YES
DO ALL EMERGENCY LIGHTS
WORK? = YES
IS THERE PROPER LIGHTING
IN EQUIPMENT ROOMS? = YES
IS THERE 36" CLEARANCE TO
ALL ELECTRICAL PANELS? =
YES
ARE THERE ANY
PENETRATIONS GOING
THROUGH FIRE RATED
WALLS/CEILINGS THAT ARE
NOT PROPERLY SEALED? =
NO
ARE THERE ANY ELECTRICAL
HAZARDS? = NO

KITCHEN HOOD:

IS THE KITCHEN HOOD
CLEAN? = NO
IS THERE ANY VISIBLE
GREASE ON THE EXHAUST
FAN? = NO
DOES THE FAN OPERATE? =
YES
ARE ALL THE GRATES IN
PLACE? = YES
IS THERE PROPER NOZZLE
COVERAGE? = YES
ARE THERE ANY
OBSTRUCTIONS TO THE
NOZZLE COVERAGE? = NO
IS ANY EQUIPMENT NOT
UNDER THE HOOD? = YES
IS THE PULL STATION
UNOBSTRUCTED? = YES
IS THERE A K EXTINGUISHER?
= YES

ARE FIRE EXTINGUISHERS
ACCESSIBLE? = YES
ARE THE FIRE
EXTINGUISHERS PROPERLY
MOUNTED? = YES
DO ALL BATTERY OPERATED
SMOKE DETECTORS
FUNCTION? = NOT

**OTHER INTERIOR
ITEMS:**

APPLICABLE
ARE THERE ANY
DECORATIVE MATERIAL
VIOLATIONS? = NO
IS THE INSPECTION LOG
BEING MAINTAINED
PROPERLY? = YES
ARE FLAMMABLES STORED
IN RATED CABINETS? = NOT
APPLICABLE
ARE GAS CYLINDERS
PROPERLY SECURED? = NOT
APPLICABLE
IS STORAGE ORGANIZED AND
UNCLUTTERED? = YES
IS THE RESPONDENT LIST UP
TO DATE? = YES

NOTES:

Sprinkler done by cmp fire

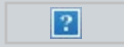
**CORRECTIVE ACTION
REQUIRED::**

1. Kitchen hood need to be cleaned
2. Electrical inspection due

**IS A RE INSPECTION
REQUIRED?:**

NO

Signature:



[Direct Link to Image](#)