## 3: Units of Any Number

| Module 1 <br> Multiplication and Division with Units of 2, 3, 4, 5, and 10 | Module 2 <br> Place Value Concepts Through Metric Measurement | Module 3 <br> Multiplication and Division with Units of $0,1,6,7,8$, and 9 | Module 4 <br> Multiplication and Area | Module 5 <br> Fractions as Numbers | Module 6 <br> Geometry, Measurement, and Data |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Topic A: Conceptual Understanding of Multiplication <br> Lesson 1: Organize, count, and represent a collection of objects. 2.NBT.A.2, MP7 <br> Lesson 2: Interpret equal groups as multiplication. <br> 3.OA.A.1, MP6, 3.Mod1.AD1 <br> Lesson 3: Relate multiplication to the array model. <br> 3.OA.A.1, MP2, 3.Mod1.AD1 <br> Lesson 4: Interpret the meaning of factors as number of groups or number in each group. <br> 3.OA.A.1, MP6, 3.Mod1.AD1 <br> Lesson 5: Represent and solve multiplication word problems by using drawings and equations. 3.OA.A.3, MP4, 3.Mod1.AD3 | Topic A: Understanding <br> Place Value Concepts <br> Through Metric <br> Measurement <br> Lesson 1: Connect the composition of 1 kilogram to the composition of 1 thousand. <br> 3.MD.A.2, MP7, 3.Mod2.AD5 <br> Lesson 2: Estimate the weight of familiar objects and read scales when weighing objects. <br> 3.MD.A.2, MP5, 3.Mod2.AD3, <br> 3.Mod2.AD4 <br> Lesson 3: Use all four operations to solve one-step word problems involving weight. <br> 3.MD.A.2, MP2, 3.Mod2.AD3, <br> 3.Mod2.AD5 <br> Lesson 4: Connect decomposition of 1 liter to the decomposition of 1 thousand. <br> 3.MD.A.2, MP7, 3.Mod2.AD4 | Topic A: Multiplication and Division Concepts with an Emphasis on Units of 6 and 8 <br> Lesson 1: Organize, count, and represent a collection of objects. 3.OA.B.5, 3.OA.C.7, MP3, 3.Mod3.AD5, 3.Mod3.AD8 <br> Lesson 2: Count by units of 6 to multiply and divide by using arrays. 3.OA.A.3, 3.OA.A. 4 3.OA.B.6, MP2, 3.Mod3.AD3, 3.Mod3.AD4, 3.Mod3.AD7 <br> Lesson 3: Count by units of 8 to multiply and divide by using arrays. <br> 3.OA.A.4, 3.OA.B.5, MP2, <br> 3.Mod3.AD4, 3.Mod3.AD5 <br> Lesson 4: Decompose pictorial arrays to create expressions with three factors. <br> 3.OA.B.5, MP7, 3.Mod3.AD7 | Topic A: Foundations for Understanding Area <br> Lesson 1: Explore attributes of squares, rectangles, and trapezoids. 3.G.A.1, MP6, 3.Mod4.AD1 <br> Lesson 2: Recognize area as an attribute of polygons. <br> 3.MD.C.5, 3.MD.C.5.a, 3.MD.C.5.b, 3.MD.C.6, MP5, 3.Mod4.AD2, 3.Mod4.AD3 <br> Lesson 3: Tile polygons to find their areas. <br> 3.MD.C.5, 3.MD.C.5.a, 3.MD.5.b, <br> 3.MD.C.6, MP3, 3.Mod4.AD2, <br> 3.Mod4.AD3 <br> Lesson 4: Compose rectangles to compare areas. <br> 3.MD.C.5, 3.MD.C.5.a, 3.MD.C.5.b, 3.MD.C.6, MP6, 3.Mod4.AD2, 3.Mod4.AD3 <br> Lesson 5: Relate side lengths to the number of tiles on a side. <br> 3.MD.C.5, 3.MD.C.5.a, | Topic A: Partition a Whole into Equal Parts <br> Lesson 1: Partition a whole into equal parts and name the fractional unit. <br> 3.G.A.2, MP6, 3.Mod5.AD10 <br> Lesson 2: Partition different wholes into fractional units concretely. 3.G.A.2, MP2, 3.Mod5.AD10 <br> Lesson 3: Partition a whole into fractional units by folding fraction strips. <br> 3.G.A.2, MP6, 3.Mod5.AD10 <br> Lesson 4: Partition a whole into fractional units pictorially and identify the unit fraction. <br> 3.NF.A.1, 3.G.A.2, MP7, <br> 3.Mod5.AD1, 3.Mod5.AD10 <br> Lesson 5: Partition a whole into fractional units and write fractions in fraction form. <br> 3.NF.A.1, 3.G.A.2, MP6, <br> 3.Mod5.AD1, 3.Mod5.AD10 | Topic A: Tell Time and Solve Time Interval Problems <br> Lesson 1: Relate skip-counting by fives on the clock to telling time on the number line. <br> 3.MD.A.1, MP7, 3.Mod6.AD1 <br> Lesson 2: Count by fives and ones on the number line as a strategy for telling time to the nearest minute on the clock. <br> 3.MD.A.1, MP3, 3.Mod6.AD1 <br> Lesson 3: Solve time word problems where the end time is unknown. <br> 3.MD.A.1, MP4, 3.Mod6.AD2 <br> Lesson 4: Solve time word problems where the start time is unknown. <br> 3.MD.A.1, MP5, 3.Mod6.AD2 <br> Lesson 5: Solve time word problems where the change in time is unknown. <br> 3.MD.A.1, MP7, 3.Mod6.AD2 |


| Topic B: Conceptual |
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| Understanding of Division |
| Lesson 6: Explore measurement |
| and partitive division by modeling |
| concretely and drawing. |
| 3.OA.A.2, MP1, 3.Mod1.AD2 |
| Lesson 7: Model measurement and |
| partitive division by drawing equal |
| groups. |
| 3.OA.A.2, MP2, 3.Mod1.AD2 |
| Lesson 8: Model measurement and |
| partitive division by drawing arrays. |
| 3.OA.A.2, 3.OA.A.3, MP1, |
| 3.Mod1.AD2, 3.Mod1.AD3 |
| Lesson 9: Represent and solve |
| division word problems using |
| drawings and equations. |
| 3.OA.A.2, 3.OA.A.3, MP5, |
| 3.Mod1.AD2, 3.Mod1.AD3 |
| Topic C: Properties of |
| Multiplication |
| Lesson 10: Demonstrate the |
| commutative property of |
| multiplication using a unit of 2 and |
| the array model. |
| 3.OA.A.1, 3.OA.B.5, MP3, |
| 3.Mod1.AD1, 3.Mod1.AD5 |
| Lesson 11: Demonstrate the |
| commutative property of |
| multiplication using a unit of 4 and |
| the array model. |
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Lesson 5: Estimate and measure liquid volume using a vertical number line and connect composition of 1 liter to composition of 1 thousand. 3.MD.A.2 MP6, 3.Mod2.AD3, 3.Mod2.AD4

Lesson 6: Use all four operations to solve one-step word problems involving liquid volume. 3.MD.A.2, MP3, 3.Mod2.AD5

Lesson 7: Solve one-step word problems using metric units. 3.MD.A.2, MP1, 3.Mod2.AD5

Topic B: Rounding to the Nearest Ten and Hundred

Lesson 8: Read temperature on a thermometer using number line concepts.
3.NBT.A.1, MP5, 3.Mod2.AD1

Lesson 9: Round two-digit numbers to the nearest ten on the vertical number line.
3.NBT.A.1, MP2, 3.Mod2.AD1

Lesson 10: Round two- and threedigit numbers to the nearest ten on the vertical number line. 3.NBT.A.1, MP8, 3.Mod2.AD1

Lesson 11: Round to the nearest hundred on the vertical number line.
3.NBT.A.1, MP7, 3.Mod2.AD1

Lesson 12: Estimate sums and differences by rounding

Lesson 5: Use the break apart and distribute strategy to multiply with units of 6 and 8 . 3.OA.B.5, MP6, 3.Mod3.AD5

Lesson 6: Use the break apart and distribute strategy to divide with units of 6 and 8 .
3.OA.B.5, MP3, 3.Mod3.AD6

Topic B: Multiplication and Division Concepts with an Emphasis on the Unit of 7

Lesson 7: Count by units of 7 to multiply and divide by using arrays and tape diagrams.
3.OA.A.3, 3.OA.A.4, 3.OA.B.6, MP5, 3.Mod1.AD7, 3.Mod3.AD3, 3.Mod3.AD4

Lesson 8: Use the break apart and distribute strategy to multiply with units of 7 .
3.OA.A.3, 3.OA.B.5, MP2, 3.Mod3.AD3, 3.Mod3.AD5

Lesson 9: Model the associative property as a strategy to multiply. 3.OA.B.5, MP7, 3.Mod3.AD7

Lesson 10: Use parentheses in expressions with different operations.
3.OA.B.5, MP6, 3.Mod3.AD7

Lesson 11: Use the break apart and distribute strategy to divide with units of 7 .
3.OA.B.5, MP3, 3.Mod3.AD6

## 3.MD.C.5.b, 3.MD.C.6, MP8,

3.Mod4.AD1, 3.Mod4.AD2, 3.Mod4.AD3

Topic B: Concepts of Area Measurement

Lesson 6: Tile rectangles with squares to make arrays and relate the side lengths to area.
3.MD.C.6, 3.MD.C.7.a, MP3, 3.Mod4.AD3, 3.Mod4.AD4

Lesson 7: Draw rows and columns to complete a rectangular array and determine its area.
3.MD.C.6, 3.MD.C.7.a, MP1, 3.Mod4.AD3, 3.Mod4.AD4

Lesson 8: Determine the area of a rectangle by using side lengths. 3.MD.C.7.a, 3.MD.C.7.b, MP6, 3.Mod4.AD4, 3.Mod4.AD5

Lesson 9: Multiply side lengths to find the area of a rectangle. 3.MD.C.7.b, MP5, 3.Mod4.AD5

Topic C: Applying Properties of Operations to Area

Lesson 10: Compose large rectangles and reason about their areas.
3.MD.C.7.c, 3.MD.C.7.d, MP7 3.Mod4.AD6, 3.Mod4.AD7, 3.Mod4.AD8

Topic B: Unit Fractions and Their Relationship to the Whole

Lesson 6: Build non-unit fractions less than 1 from unit fractions concretely.
3.NF.A.1, 3.G.A.2, MP7, 3.Mod5.AD2, 3.Mod5.AD10

Lesson 7: Identify and represent a whole as two parts: a unit fraction and a non-unit fraction.
3.NF.A.1, 3.G.A.2, MP2,
3.Mod5.AD1, 3.Mod5.AD2, 3.Mod5.AD10

Lesson 8: Identify and represent a whole as two non-unit fractions. 3.NF.A.1, 3.NF.A.3.c, 3.G.A.2, MP7, 3.Mod5.AD2, 3.Mod5.AD6, 3.Mod5.AD10

Lesson 9: Compare unit fractions by reasoning about their size concretely.
3.NF.A.3.d, 3.G.A.2, MP3, 3.Mod5.AD7, 3.Mod5.AD8, 3.Mod5.AD10

Lesson 10: Compare non-unit fractions less than 1 with the same numerator by using tape diagrams. 3.NF.A.3.d, 3.G.A.2, MP6, 3.Mod5.AD7, 3.Mod5.AD10

Topic C: Fractions on the Number Line

Lesson 6: Solve time word problems and use time data to create a line plot. 3.MD.A.1, MP4, 3.Mod6.AD. 2

Lesson 7: Count coins and create money word problems. (Optional) 3.OA.D.8, MP2, 3.Mod3.AD9

Topic B: Attributes of TwoDimensional Figures

Lesson 8: Compare and classify quadrilaterals
3.G.A.1, MP3, 3.Mod6.AD7

Lesson 9: Compare and classify other polygons. 3.G.A.1, MP6, 3.Mod6.AD7 Lesson 10: Draw polygons with specified attributes. 3.G.A.1, MP5, 3.Mod6.AD7, 3.Mod6.AD8

Lesson 11: Reason about composing polygons by using tetrominoes.
3.G.A.1, MP8, 3.Mod6.AD7, 3.Mod6.AD8

Lesson 12: Reason about composing polygons by using tangrams. 3.G.A.1, MP1, 3.Mod6.AD7, 3.Mod6.AD8

Topic C: Problem Solving with Perimeter

3.OA.A.2, 3.OA.A.3, 3.OA.A.4,
3.OA.B.6, MP4, 3.Mod1.AD2,
3.Mod1.AD3, 3.Mod1.AD4,
3.Mod1.AD7

Lesson 18: Represent and solve measurement and partitive division word problems.
3.OA.A.2, 3.OA.A.3, MP2,
3.Mod1.AD2, 3.Mod1.AD3

Topic E: Application of Multiplication and Division Concepts

Lesson 19: Use the distributive property to break apart multiplication problems into known facts.
3.OA.B.5, 3.OA.C.7, MP6,
3.Mod1.AD6, 3.Mod1.AD8

Lesson 20: Use the distributive property to break apart division problems into known facts.
3.OA.B.6, 3.OA.C.7, MP3,
3.Mod1.AD7, 3.Mod1.AD8

## Lesson 21: Compose and

 decompose arrays to create expressions with three factors. 3.OA.C.7, MP8, 3.Mod1.AD8Lesson 22: Represent and solve two-step word problems using the properties of multiplication.
3.OA.A.3, 3.OA.C.7, 3.OA.D.8, MP5, 3.Mod1.AD3, 3.Mod1.AD8 3.Mod1.AD9

Topic D: Two- and ThreeDigit Measurement Addition and Subtraction

Lesson 20: Add measurements using the standard algorithm to compose larger units once. 3.NBT.A.2, MP4, 3.Mod2.AD2

Lesson 21: Add measurements using the standard algorithm to compose larger units twice. 3.NBT.A.2, MP5, 3.Mod2.AD2

Lesson 22: Subtract measurements using the standard algorithm to decompose larger units once. 3.NBT.A.2, MP1, 3.Mod2.AD2

Lesson 23: Subtract measurements using the standard algorithm to decompose larger units twice. 3.NBT.A.2, MP6, 3.Mod2.AD2

Lesson 24: Subtract measurements using the standard algorithm to decompose larger units across two place values.
3.NBT.A.2, MP3, 3.Mod2.AD2

Lesson 25: Solve two-step word problems.
3.OA.D.8, MP1, 3.Mod2.AD9
operations and assess the
reasonableness of solutions. 3.OA.D.8, MP4, 3.Mod3.AD9

Topic D: Multiplication with Multiples of 10 and Further Application of Concepts

Lesson 20: Multiply by multiples of 10 by using the place value chart. 3.NBT.A.3, MP2, 3.Mod3.AD11

Lesson 21: Multiply by multiples of 10 by using place values strategies and the associative property.
3.OA.B.5, 3.NBT.A.3, MP7, 3.Mod3.AD7, 3.Mod3.AD11

Lesson 22: Solve two-step word problems involving multiplication of single-digit factors and multiples of 10.
3.OA.D.8, 3.NBT.A.3, MP4, 3.Mod3.AD9, 3.Mod3.AD11

Lesson 23: Identify patterns and apply strategies to multiply with units of 11 and 12. (Optional) units of 11 and 12. (Optiona) 3.OA.B.5, 3.OA.D.9, MP5,
3.Mod3.AD5, 3.Mod3.AD7, 3.Mod3.AD5, 3.Mod3.AD7,
3.Mod3.AD10 3.Mod3.ADIO

Lesson 24: Organize, count, and represent a collection of objects. 3.OA.B.5, 3.OA.C.7, MP5, 3.Mod3.AD5, 3.Mod3.AD7, 3.Mod3.AD8

Lesson 25: Apply multiplication and division concepts to complete a multi-part task. (Optional)
Lesson 18: Find the area of shapes Lesson 18: Find the area of shape
and represent area data on a line plot.
3.MD.C.6, 3.MD.C.7.b,
3.MD.C.7.d, MP6, 3.Mod4.AD3, 3.Mod4.AD5, 3.Mod4.AD7

Lesson 19: Apply area concepts to complete a multi-part task. 3.MD.C.7.b, 3.MD.C.7.d, MP1, 3.Mod4.AD5, 3.Mod4.AD8
3.NF.A.3.a, 3.NF.A.3.b,
3.NF.A.3.c, MP7, 3.Mod5.AD5, 3.Mod5.AD6

Lesson 18: Compare fractions with like units by using a number line. 3.NF.A.2.b, 3.NF.A.3.d, MP3, 3.NF.A.2.b, 3.NF.A.3.d, MP3,

Lesson 19: Compare fractions with unlike units but the same numerator by using number lines.
3.NF.A.3.d, MP1, 3.Mod5.AD7

Lesson 20: Compare fractions with related units by using a number line.
3.NF.A.3.d, MP5, 3.Mod5.AD7

Lesson 21: Compare various fractions by representing them on number lines.
3.NF.A.3.d, MP6, 3.Mod5.AD7

Topic E: Equivalent Fractions

Lesson 22: Identify fractions equivalent to whole numbers by using number lines.
3.NF.A.3.a, 3.NF.A.3.b,
3.NF.A.3.c, MP2, MP8,
3.Mod5.AD5, 3.Mod5.AD6

Lesson 23: Reason to find fractions equivalent to whole numbers by using patterns and number lines. 3.NF.A.3.a, 3.NF.A.3.b,
3.NF.A.3.c, MP5, 3.Mod5.AD5, 3.Mod5.AD6

Lesson 24: Generate equivalent Lesson 24: Generate equivalent
fractions greater than 1 by using a line plot for measurement data to the nearest half unit and quarter unit.
3.MD.B.4, MP3, 3.Mod6.AD4

Lesson 22: Generate categorical data and represent it by using a scaled picture graph. 3.MD.B.3, MP1, 3.Mod6.AD3

Lesson 23: Solve problems by creating scaled picture graphs and scaled bar graphs.
3.MD.B.3, MP7, 3.Mod2.AD6,
3.Mod2.AD7, 3.Mod6.AD3

Lesson 24: Organize, count, and represent a collection of objects. MP5

Lesson 25: Name and count numbers greater than 1,000. (Optional)

Lesson 26: Fluently multiply and divide within 100 and add and subtract within 1,000.
3.OA.C.7, 3.NBT.A.2, MP3


## 4: Fractional Units

| Module 1 <br> Place Value Concepts for Addition and Subtraction | Module 2 <br> Place Value Concepts for Multiplication and Division | Module 3 <br> Multiplication and Division of Multi-Digit Numbers | Module 4 <br> Foundations for Fraction Operations | Module 5 <br> Place Value Concepts for Decimal Fractions | Module 6 <br> Angle Measurements and Plane Figures |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Topic A: Multiplication as Multiplicative Comparison <br> Lesson 1: Interpret multiplication as multiplicative comparison. <br> 4.OA.A.1, 4.OA.A.2, MP7, <br> 4.Mod1.AD1, 4.Mod1.AD2, <br> 4.Mod1.AD3 <br> Lesson 2: Solve multiplicative comparison problems with unknowns in various positions. <br> 4.OA.A.1, 4.OA.A.2, MP7, <br> 4.Mod1.AD1, 4.Mod1.AD2, <br> 4.Mod1.AD3 <br> Lesson 3: Describe relationships between measurements by using multiplicative comparison. <br> 4.OA.A.1, 4.OA.A.2, MP2, <br> 4.Mod1.AD1, 4.Mod1.AD2, <br> 4.Mod1.AD3 <br> Lesson 4: Represent the composition of larger units of money by using multiplicative comparison. | Topic A: Compose and Decompose Units of Ten <br> Lesson 1: Multiply multiples of 10 by one-digit numbers by using the associative property of multiplication. <br> 4.NBT.B.5, MP7, 4.Mod2.AD6 <br> Lesson 2: Divide two- and threedigit multiples of 10 by one-digit numbers. <br> 4.NBT.B.6, MP2, 4.Mod2.AD7 <br> Lesson 3: Investigate and use a formula for the area of a rectangle. <br> 4.MD.A.3, MP1, 4.Mod2.AD11 <br> Topic B: Multiplication of Tens and Ones by One-Digit Numbers <br> Lesson 4: Multiply by using familiar strategies. <br> 4.NBT.B.5, MP5, 4.Mod2.AD6 | Topic A: Multiplication and Division of Multiples of Tens, Hundreds, and Thousands <br> Lesson 1: Divide multiples of 100 and 1000 . <br> 4.NBT.B.6, MP8, 4.Mod3.AD3 <br> Lesson 2: Multiply by multiples of 100 and 1000. <br> 4.NBT.B.5, MP7, 4.Mod3.AD2 <br> Lesson 3: Multiply a two-digit multiple of 10 by a two-digit multiple of 10 . <br> 4.NBT.B.5, MP3, 4.Mod3.AD2 <br> Topic B: Division of Thousands, Hundreds, Tens, and Ones <br> Lesson 4: Apply place value strategies to divide hundreds, tens, and ones. <br> 4.NBT.B.6, MP1, 4.Mod3.AD3 | Topic A: Fraction <br> Decomposition and Equivalence <br> Lesson 1: Decompose whole numbers into a sum of unit fractions. <br> NF.B.3.a, 4.NF.B.3.b, MP7, 4.Mod4.AD4 <br> Lesson 2: Decompose fractions into a sum of unit fractions. <br> 4.NF.B.3.a, 4.NF.B.3.b, MP2, 4.Mod4.AD4 <br> Lesson 3: Decompose fractions into a sum of fractions. <br> 4.NF.B.3.a, 4.NF.B.3.b, MP6, 4.Mod4.AD4 <br> Lesson 4: Represent fractions by using various fraction models. 4.NF.B.3.a, 4.NF.B.3.b, MP4, 4.Mod4.AD4 <br> Lesson 5: Rename fractions greater than 1 as mixed numbers. | Topic A: Exploration of Tenths <br> Lesson 1: Organize, count, and represent a collection of money. 4.NF.C.6, MP5, 4.Mod5.AD3 <br> Lesson 2: Decompose 1 one and express tenths in fraction form and decimal form. <br> 4.NF.C.6, MP8, 4.Mod5.AD3 <br> Lesson 3: Represent tenths as a place value unit. <br> 4.NF.C.6, MP7, 4.Mod5.AD3 <br> Lesson 4: Write mixed numbers in decimal form with tenths. <br> 4.NF.C.6, MP6, 4.Mod5.AD3 <br> Topic B: Tenths and Hundredths <br> Lesson 5: Decompose 1 one and express hundredths in fraction form and decimal form. | Topic A: Lines and Angles <br> Lesson 1: Identify and draw points, lines, line segments, rays, and angles. <br> 4.G.A.1, MP6, 4.Mod6.AD4, 4.Mod6.AD5 <br> Lesson 2: Identify right, acute, obtuse, and straight angles. <br> 4.G.A.1, MP7, 4.Mod6.AD4, <br> 4.Mod6.AD5 <br> Lesson 3: Draw right, acute, obtuse, and straight angles. <br> 4.G.A.1, MP6, 4.Mod6.AD4, <br> 4.Mod6.AD5 <br> Lesson 4: Identify, define, and draw perpendicular lines. <br> 4.G.A.1, MP6, 4.Mod6.AD4, <br> 4.Mod6.AD5 <br> Lesson 5: Identify, define, and draw parallel lines. <br> 4.G.A.1, MP6, 4.Mod6.AD4, <br> 4.Mod6.AD5 |



Lesson 11: Find 1, 10, and 100
thousand more than and less than a given number.
4.NBT.A.2, MP1, 4.Mod1.AD7

Lesson 12: Round to the nearest
thousand.
4.NBT.A.3, MP6, 4.Mod1.AD9

Lesson 13: Round to the nearest ten thousand and hundred thousand. 4.NBT.A.3, MP6, 4.Mod1.AD9

Lesson 14: Round multi-digit
numbers to any place.
4.NBT.A.3, MP8, 4.Mod1.AD9

Lesson 15: Apply estimation to realworld situations by using rounding. 4.OA.A.3, 4.NBT.A.3, MP3,
4.Mod1.AD4, 4.Mod1.AD9

Topic D: Multi-Digit Whole
Number Addition and
Subtraction
Lesson 16: Add by using the standard algorithm.
4.OA.A.3, 4.NBT.B.4, MP4, 4.Mod1.AD4, 4.Mod1.AD10

Lesson 17: Solve multi-step addition word problems by using the standard algorithm. 4.OA.A.3, 4.NBT.B.4, MP2, 4.Mod1.AD5, 4.Mod1.AD10

Lesson 18: Subtract by using the standard algorithm, decomposing larger units once. 4.NBT.B.4, MP6, 4.Mod1.AD10

Lesson 13: Divide three-digit numbers by one-digit numbers by using an area model. 4.NBT.B.6, MP3, 4.Mod2.AD7

Lesson 14: Divide two-digit numbers by one-digit numbers by using place value strategies. 4.NBT.B.6, MP6, 4.Mod2.AD7

Lesson 15: Divide three-digit numbers by one-digit numbers by using place value strategies. 4.NBT.B.6, MP7, 4.Mod2.AD7

Lesson 16: Divide by using the break apart and distribute strategy. 4.NBT.B.6, MP1, 4.Mod2.AD7

Topic D: Problem Solving with Measurement

Lesson 17: Express measurements of length in terms of smaller units. 4.MD.A.1, 4.MD.A.2, MP8, 4.Mod2.AD8, 4.Mod2.AD9, 4.Mod2.AD10

Lesson 18: Investigate and use formulas for the perimeter of a rectangle.
4.MD.A.3, MP4, 4.Mod2.AD11

Lesson 19: Apply area and perimeter formulas to solve problems.
4.MD.A.3, MP2, 4.Mod2.AD11

Lesson 20: Solve word problems involving additive and multiplicative comparisons.

Topic D: Multiplication of Two-Digit Numbers by TwoDigit Numbers

Lesson 13: Multiply two-digi numbers by two-digit multiples of 10.
4.NBT.B.5, MP5, 4.Mod3.AD2

Lesson 14: Apply place value strategies to multiply two-digit numbers by two-digit numbers. 4.NBT.B.5, MP2, 4.Mod3.AD2

Lesson 15: Multiply with four partial products.
4.NBT.B.5, MP6, 4.Mod3.AD2

Lesson 16: Multiply with two partial products. 4.NBT.B.5, MP7, 4.Mod3.AD2

Lesson 17: Apply the distributive property to multiply. 4.NBT.B.5, MP2, 4.Mod3.AD2

Topic E: Problem Solving with Measurement

Lesson 18: Express units of time in terms of smaller units.
4.MD.A.1, 4.MD.A.2, MP1,
4.Mod3.AD4, 4.Mod3.AD5

Lesson 19: Express customary measurements of weight in terms of smaller units.
4.MD.A.1, 4.MD.A.2, MP4, 4.Mod3.AD4, 4.Mod3.AD5

1 and generate equivalent mixed numbers.
4.NF.A.1, MP3, 4.Mod4.AD1, 4.Mod4.AD2

Topic C: Compare Fractions
Lesson 13: Compare fractions by using the benchmarks $0, \frac{1}{2}$, and 1 . 4.NF.A.2, MP3, 4.Mod4.AD3

Lesson 14: Compare fractions with related denominators. 4.NF.A.2, MP5, 4.Mod4.AD3

Lesson 15: Compare fractions with related numerators. 4.NF.A.2, MP5, 4.Mod4.AD3

Lesson 16: Generate a common numerator or denominator to compare fractions.

## 4.NF.A.2, MP1, 4.Mod4.AD3

Lesson 17: Apply fraction comparison strategies to compare fractions greater than 1. 4.NF.A.2, MP7, 4.Mod4.AD3

Topic D: Add and Subtract Fractions

Lesson 18: Estimate sums and differences of fractions by using benchmarks.

## 4.NF.B.3.a, 4.NF.B.3.b, 4.NF.B.3.d,

 MP3, 4.Mod4.AD4, 4.Mod4.AD7 Lesson 19: Add and subtract fractions with like unitsLesson 13: Apply fraction equivalence to add mixed numbers with tenths and hundredths.
4.NF.C.5, MP7, 4.Mod5.AD2

Lesson 14: Solve word problems with tenths and hundredths. 4.NF.C.5, 4.MD.A.2, MP4, 4.Mod5.AD2, 4.Mod5.AD5

Topic C: Determine
Unknown Angle Measures
Lesson 13: Decompose angles by using pattern blocks. 4.MD.C.7, MP2, 4.Mod6.AD3

Lesson 14: Find unknown angle measures within right and straight angles.
4.MD.C.7, MP7, 4.Mod6.AD3

Lesson 15: Find unknown angle measures within a decomposed angle of up to $180^{\circ}$.
4.MD.C.7, MP5, 4.Mod6.AD3

Lesson 16: Find unknown angle measures around a point. 4.MD.C.7, MP1, 4.Mod6.AD3

Topic D: Two-Dimensional Figures and Symmetry

Lesson 17: Recognize, identify, and draw lines of symmetry.
4.G.A.3, MP7, 4.Mod6.AD7

Lesson 18: Analyze and classify triangles based on side length, angle measures, or both
4.G.A.1, 4.G.A.2, MP3,
4.Mod6.AD5, 4.Mod6.AD6

Lesson 19: Construct and classify triangles based on given attributes. 4.G.A.1, 4.G.A.2, MP6,
4.Mod6.AD5, 4.Mod6.AD6

Lesson 20: Express customary
measurements of liquid volume in
terms of smaller units.
4.MD.A.1, 4.MD.A.2, MP5,
4.Mod3.AD4, 4.Mod3.AD5

Topic F: Remainders, Estimating, and Problem Solving

Lesson 21: Find whole-number quotients and remainders. 4.OA.A.3, 4.NBT.B.6, MP2, 4.Mod3.AD1, 4.Mod3.AD3

Lesson 22: Represent, estimate, and solve division word problems. 4.OA.A.3, 4.NBT.B.6, MP1, 4.Mod3.AD1, 4.Mod3.AD3

Lesson 23: Solve multi-step word problems and interpret remainders. 4.OA.A.3, MP4, 4.Mod3.AD1

Lesson 24: Solve multi-step word problems and assess the reasonableness of solutions. 4.OA.A.3, MP3, 4.Mod3.AD1
4.NF.B.3.a, 4.NF.B.3.b, MP4,

Lesson 20: Subtract a fraction from a whole number.
4.NF.B.3.a, 4.NF.B.3.b, 4.NF.B.3.d, 4.MD.A.2, MP1, 4.Mod4.AD4, 4.Mod4.AD7

Lesson 21: Solve addition and subtraction word problems and estimate the reasonableness of the answers.
4.NF.B.3.a, 4.NF.B.3.b, 4.NF.B.3.d, 4.MD.A.2, MP1, 4.Mod4.AD4 4.Mod4.AD7

Lesson 22: Add two fractions with related units. (Optional) 4.NF.B.3.a, 4.NF.B.3.b, MP5, 4.Mod4.AD4

Topic E: Add and Subtract Mixed Numbers

Lesson 23: Add a fraction to a mixed number.
4.NF.B.3.c, MP7, 4.Mod4.AD5

Lesson 24: Add a mixed number to a mixed number.
4.NF.B.3.c, 4.NF.B.3.d, MP7,
4.Mod4.AD5, 4.Mod4.AD7

Lesson 25: Subtract a fraction from a mixed number, part 1 .
4.NF.B.3.c, MP6, 4.Mod4.AD6

Lesson 26: Subtract a fraction from a mixed number, part 2.
4.NF.B.3.c, MP7, 4.Mod4.AD6



## 5: Fractions Are Numbers

| Module 1 <br> Place Value Concepts for Multiplication and Division with Whole Numbers | Module 2 <br> Addition and Subtraction with Fractions | Module 3 <br> Multiplication and Division with Fractions | Module 4 <br> Place Value Concepts for Decimal Operations | Module 5 <br> Addition and Multiplication with Area and Volume | Module 6 <br> Foundations to Geometry in the Coordinate Plane |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Topic A: Place Value Understanding for Whole Numbers <br> Lesson 1: Relate adjacent place value units by using place value understanding. <br> 5.NBT.A.1, MP5, 5.Mod1.AD6 <br> Lesson 2: Multiply and divide by 10,100 , and 1,000 and identify patterns in the products and quotients. <br> 5.NBT.A.1, 5.NBT.A.2, MP8, 5.Mod1.AD6, 5.Mod1.AD7 <br> Lesson 3: Use exponents to multiply and divide by powers of 10. <br> 5.NBT.A.2, MP3, 5.Mod1.AD7, <br> 5.Mod1.AD8 <br> Lesson 4: Estimate products and quotients by using powers of 10 and their multiples. <br> 5.NBT, 5.NBT.A.2, MP7, <br> 5.Mod1.AD5, 5.Mod1.AD7 | Topic A: Fractions and Division <br> Lesson 1: Interpret a fraction as division. <br> 5.NF.B.3, MP7, 5.Mod2.AD8, 5.Mod2.AD9, 5.Mod2.AD10 <br> Lesson 2: Interpret a fraction as division by writing remainders as fractions. <br> 5.NF.B.3, MP5, 5.Mod2.AD9, 5.Mod2.AD10 <br> Lesson 3: Represent fractions as division by using models. <br> 5.NF.B.3, MP2, 5.Mod2.AD9, 5.Mod2.AD10 <br> Lesson 4: Solve word problems involving division and fractions. <br> 5.NF, 5.NF.B.3, MP1, 5.Mod2.AD1, <br> 5.Mod2.AD9, 5.Mod2.AD10 | Topic A: Multiplication of a Whole Number by a Fraction <br> Lesson 1: Find fractions of a set with arrays. <br> 5.NF.B.4.a, 5.NF.B.5.b, MP8, 5.Mod3.AD7, 5.Mod3.AD9 <br> Lesson 2: Interpret fractions as division to find fractions of a set with tape diagrams and number lines. <br> 5.NF.B.4.a, 5.NF.B.5.b, MP4, 5.Mod3.AD7, 5.Mod3.AD9 <br> Lesson 3: Multiply a whole number by a fraction less than 1. <br> 5.NF.B.4, 5.NF.B.4.a, 5.NF.B.5.a, MP5, 5.Mod3.AD6, 5.Mod3.AD7, 5.Mod3.AD8 <br> Lesson 4: Multiply a whole number by a fraction. <br> 5.NF.B.4.a, 5.NF.B.5.a, 5.NF.B.5.b, MP2, 5.Mod3.AD7, 5.Mod3.AD8, 5.Mod3.AD9 | Topic A: Understanding Decimal Numbers with Place Value and Fraction Thinking <br> Lesson 1: Model and relate decimal place value units to thousandths. 5.NBT.A, 5.NBT.A.1, 5.NBT.A.3.a, MP8, 5.Mod4.AD5, 5.Mod4.AD6, 5.Mod4.AD9 <br> Lesson 2: Represent thousandths as a place value unit. <br> 5.NBT.A, 5.NBT.A.1, 5.NBT.A.3.a, MP7, 5.Mod4.AD5, 5.Mod4.AD6, 5.Mod4.AD9 <br> Lesson 3: Represent decimal numbers to the thousandths place in different forms. <br> 5.NBT.A, 5.NBT.A.1, 5.NBT.A.3.a, MP7, 5.Mod4.AD5, 5.Mod4.AD6, 5.Mod4.AD9 <br> Lesson 4: Relate the values of digits in a decimal number by using place value understanding. <br> 5.NBT.A.1, MP6, 5.Mod4.AD6 | Topic A: Drawing, Analysis, and Classification of Two-Dimensional Figures <br> Lesson 1: Analyze hierarchies and identify properties of quadrilaterals. <br> 5.G.B.3, 5.G.B.4, MP8, <br> 5.Mod5.AD13, 5.Mod5.AD14 <br> Lesson 2: Classify trapezoids based on their properties. <br> 5.G.B.3, 5.G.B.4, MP7, <br> 5.Mod5.AD13, 5.Mod5.AD14 <br> Lesson 3: Classify parallelograms based on their properties. <br> 5.G.B.3, 5.G.B.4, MP3, <br> 5.Mod5.AD13, 5.Mod5.AD14 <br> Lesson 4: Classify rectangles and rhombuses based on their properties. <br> 5.G.B.3, 5.G.B.4, MP6, <br> 5.Mod5.AD13, 5.Mod5.AD14 <br> Lesson 5: Classify kites and squares based on their properties. | Topic A: Coordinate Systems <br> Lesson 1: Construct a coordinate system on a line. <br> 5.G.A.1, MP6, 5.Mod6.AD3 <br> Lesson 2: Construct a coordinate system in a plane. <br> 5.G.A.1, MP7, 5.Mod6.AD3 <br> Lesson 3: Identify and plot points by using ordered pairs. <br> 5.G.A.1, MP1, 5.Mod6.AD3 <br> Lesson 4: Describe the distance and direction between points in the coordinate plane. <br> 5.G.A.2, MP2, 5.Mod6.AD4, 5.Mod6.AD5 <br> Topic B: Patterns in the Coordinate Plane <br> Lesson 5: Identify properties of horizontal and vertical lines. 5.G.A.2, MP8, 5.Mod6.AD5 |



Lesson 5: Multiply and divide decimal numbers by powers of 10 . 5.NBT.A.2, MP8, 5.Mod4.AD7

Lesson 6: Compare decima numbers to the thousandths place. 5.NBT.A.3, 5.NBT.A.3.b, MP5, 5.Mod4.AD8, 5.Mod4.AD10

Lesson 7: Round decimal numbers to the nearest one, tenth, or hundredth.
5.NBT.A.4, MP6, 5.Mod4.AD11

Lesson 8: Round decimal numbers to any place value unit. 5.NBT.A.4, MP3, 5.Mod4.AD11

Topic B: Addition and Subtraction of Decimal Numbers

Lesson 9: Add decimal numbers by using different methods. 5.NBT.B, 5.NBT.B.7, MP5, 5.Mod4.AD12, 5.Mod4.AD14, 5.Mod4.AD19

Lesson 10: Add decimal numbers by using place value understanding 5.NBT.B.7, MP1, 5.Mod4.AD14, 5.Mod4.AD18, 5.Mod4.AD19

Lesson 11: Subtract decima numbers by using different methods.
5.NBT.B.7, MP7, 5.Mod4.AD15, 5.Mod4.AD18, 5.Mod4.AD19

Lesson 12: Subtract decimal numbers by using place value understanding.
5.G.B.3, 5.G.B.4, MP6, 5.Mod5.AD13, 5.Mod5.AD14

Lesson 6: Identify quadrilaterals from given properties. 5.G.B.3, 5.G.B.4, MP1 5.Mod5.AD13, 5.Mod5.AD14

Lesson 7: Classify quadrilaterals in a hierarchy based on properties. 5.G.B.3, 5.G.B.4, MP7, 5.Mod5.AD13, 5.Mod5.AD14

Topic B: Areas of
Rectangular Figures with Fraction Side Lengths

Lesson 8: Find areas of square tiles with fraction side lengths by relating the tile to a unit square. 5.NF.B.4.b, MP7, 5.Mod5.AD2

Lesson 9: Organize, count, and represent a collection of square tiles.
5.NF.B.4.b, MP5, 5.Mod5.AD2

Lesson 10: Find the area of a rectangle with fraction side lengths by relating the rectangle to a unit square. 5.NF.B.5.b, MP7, 5.Mod5.AD2

Lesson 11: Find areas of rectangles with fraction side lengths by using multiplication.
5.NF.B.4.b, MP8, 5.Mod5.AD3

Lesson 12: Multiply mixed numbers.
5.NF.B.4, 5.NF.B.4.b, MP5 5.Mod5.AD1, 5.Mod5.AD4

Lesson 6: Use properties o horizontal and vertical lines to solve problems.
5.G.A.2, MP6, 5.Mod6.AD5

Lesson 7: Generate number patterns to form ordered pairs. 5.OA.B.3, 5.G.A.2, MP7, 5.Mod6.AD1, 5.Mod6.AD2, 5.Mod6.AD5

Lesson 8: Identify addition and subtraction relationships between corresponding terms in number patterns.
5.OA.B.3, 5.G.A.2, MP8, 5.Mod6.AD1, 5.Mod6.AD2, 5.Mod6.AD5

Lesson 9: Identify multiplication and division relationships between corresponding terms in number patterns.
5.OA.B.3, 5.G.A.2, MP8,
5.Mod6.AD1, 5.Mod6.AD2, 5.Mod6.AD5

Lesson 10: Identify mixedoperation relationships between corresponding terms in number patterns. (Optional) MP7

Topic C: Solve Mathematica Problems in the Coordinate Plane

Lesson 11: Draw lines in the coordinate plane and identify points on the lines
5.OA.B.3, 5.G.A.2, MP3,
5.OA.B.3, 5.G.A.2, MP3,
5.Mod6.AD2, 5.Mod6.AD5

## Topic C: Division of Whole

 NumbersLesson 12: Divide two- and threedigit numbers by multiples of 10 . 5.NBT, 5.NBT.B.6, MP2 5.Mod1.AD5, 5.Mod1.AD10, 5.Mod1.AD11

Lesson 13: Divide two-digit numbers by two-digit numbers in problems that result in one-digit quotients.
5.NBT, 5.NBT.B.6, MP7,
5.NBT, 5.NBT.B.6, MP7,
5.Mod1.AD5, 5.Mod1.AD10,
5.Mod1.AD5, 5.Mod1.AD10, 5.Mod1.AD11

Lesson 14: Divide three-digit numbers by two-digit numbers in problems that result in one-digit quotients.
5.NBT, 5.NBT.B.6, MP1,
5.Mod1.AD5, 5.Mod1.AD10

Lesson 15: Divide three-digit numbers by two-digit numbers in problems that result in two-digit quotients.
5.NBT, 5.NBT.B.6, MP7,
5.Mod1.AD5., 5.Mod1.AD10,
5.Mod1.AD11

Lesson 16: Divide four-digit numbers by two-digit numbers. 5.NBT, 5.NBT.B.6, MP2, 5.Mod1.AD5., 5.Mod1.AD10
Lesson 10: Add whole numbers
mixed numbers and add mixed
numbers with related units.
5.NF.A.1, 5.NF.A.2, MP5,
5.Mod2.AD4, 5.Mod2.AD7

Lesson 11: Add mixed numbers with unrelated units.
5.NF.A.1, 5.NF.A.2, MP2,
5.Mod2.AD4, 5.Mod2.AD5, 5.Mod2.AD6

Lesson 12: Subtract whole numbers from mixed numbers and mixed numbers from whole numbers. 5.NF.A, 5.NF.A.1, 5.NF.A.2, MP6, 5.Mod2.AD2, 5.Mod2.AD4, 5.Mod2.AD7

Lesson 13: Subtract mixed numbers from mixed numbers with related units. 5.NF.A.1, 5.NF.A.2, MP7, 5.Mod2.AD4, 5.Mod2.AD7

Lesson 14: Subtract mixed numbers from mixed numbers with unrelated units.
5.NF.A.1, 5.NF.A.2, MP4
5.Mod2.AD4, 5.Mod2.AD5, 5.Mod2.AD6

Topic D: Problem Solving and Line Plots with Fractional Measurements

Lesson 15: Represent data on a line plot.
5.MD.B.2, MP6, 5.Mod2.AD11

Lesson 16: Solve problems by using data from a line plot.
5.MD.B.2, MP3, 5.Mod2.AD11

Lesson 11: Multiply fractions.
5.NF.B.4.a, 5.NF.B.5.a, 5.NF.B.5.b, MP3, 5.Mod3.AD7, 5.Mod3.AD8, 5.Mod3.AD9

Topic C: Division with a Unit
Fraction and a Whole
Number
Lesson 12: Divide a nonzero whole number by a unit fraction to find the number of groups.
5.OA.A.2, 5.NF.B.7.b, 5.NF.B.7.c, MP1, 5.Mod3.AD3, 5.Mod3.AD12, 5.Mod3.AD13

Lesson 13: Divide a nonzero whole number by a unit fraction to find the size of the group.
5.NF.B.7.b, 5.NF.B.7.c, MP2 5.Mod3.AD12, 5.Mod3.AD13

Lesson 14: Divide a unit fraction by a nonzero whole number. 5.NF.B.7.a, 5.NF.B.7.c, MP4, 5.Mod3.AD11, 5.Mod3.AD13

Lesson 15: Divide by whole numbers and unit fractions. 5.NF.B.7.a, 5.NF.B.7.b, 5.NF.B. 7 c MP3, 5.Mod3.AD11, 5.Mod3.AD12, 5.Mod3.AD13

Lesson 16: Reason about the size of quotients of whole numbers and unit fractions and quotients of unit fractions and whole numbers.
5.OA.A.2, 5.NF.B.7.a, 5.NF.B.7.b, MP7, 5.Mod3.AD4, 5.Mod3.AD11, 5.Mod3.AD12
5.NBT.B, 5.NBT.B.7, MP5, 5.Mod4.AD12, 5.Mod4.AD15, 5.Mod4.AD19

Lesson 13: Solve word problems involving addition and subtraction of decimal numbers and fractions. 5.NBT.B, MP6, 5.Mod4.AD13

Topic C: Multiplication of Decimal Numbers

Lesson 14: Multiply decimal numbers to hundredths by one-digit whole numbers by using different models.
5.NBT.B.7, MP7, 5.Mod4.AD16, 5.Mod4.AD18, 5.Mod4.AD19

## Lesson 15: Multiply decimal

 numbers to hundredths by one-digit whole numbers and multiples of 10 , 100 , or 1,000 by using different written methods.5.NBT.B, 5.NBT.B.7, MP1 5.Mod4.AD12, 5.Mod4.AD16, 5.Mod4.AD19

Lesson 16: Multiply decimal numbers to hundredths by twodigit whole numbers by using area models and vertical form. 5.NBT.B, 5.NBT.B.7, MP8 5.Mod4.AD13, 5.Mod4.AD16, 5.Mod4.AD18

Lesson 17: Multiply decimal numbers to hundredths by twodigit whole numbers by using different methods.

Lesson 13: Solve mathematical problems involving areas of composite figures with mixednumber side lengths.
5.NF.B.4.b, MP7, 5.Mod5.AD3

Lesson 14: Solve real-world problems involving areas of composite figures with mixed-number side lengths 5.NF.B.4.b, 5.NF.B.6, MP1 5.Mod5.AD3, 5.Mod5.AD5

Lesson 15: Solve multi-step word problems involving multiplication of mixed numbers.
5.NF.B.6, MP2, 5.Mod5.AD5

Topic C: Volume Concepts
Lesson 16: Identify attributes and properties of right rectangular prisms.
5.MD.C.3, 5.MD.C.3.a, 5.MD.C.3.b, MP7, 5.Mod5.AD6

Lesson 17: Find the volume of right rectangular prisms by packing with unit cubes and counting. 5.MD.C.3, 5.MD.C.3.a, 5.MD.C.3.b, 5.MD.C.4, MP2, 5.Mod5.AD6, 5.Mod5.AD7

Lesson 18: Find the volume of right rectangular prisms by packing with improvised units.
5.MD.C.4, MP3, 5.Mod5.AD7

Lesson 19: Compose and decompose right rectangular prisms to find their volume by using layers.

Lesson 12: Graph and classify quadrilaterals in the coordinate plane.
5.G.A.2, 5.G.B.4, MP7, 5.Mod5.AD14, 5.Mod6.AD5

Lesson 13: Draw symmetric figures in the coordinate plane. 5.G.A.2, MP1, 5.Mod6.AD5

Lesson 14: Solve mathematical problems with rectangles in the coordinate plane. 5.G.A.2, MP5, 5.Mod6.AD5

Lesson 15: Use the coordinate plane to reason about perimeters and areas of rectangles.
5.G.A.2, 5.NF.B.4.b, MP3,
5.Mod5.AD3, 5.Mod6.AD5

Topic D: Solve Real-World Problems with the Coordinate Plane

Lesson 16: Interpret graphs tha represent real-world situations. 5.G.A.2, MP3, 5.Mod6.AD4, 5.Mod6.AD5

Lesson 17: Plot data in the coordinate plane and analyze relationships.
5.G.A.2, MP2, 5.Mod6.AD4

Lesson 18: Interpret line graphs. 5.G.A.2, MP2, 5.Mod6.AD5

Lesson 19: Reason about visual patterns by using tables and graphs. (Optional) graph

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| Topic D: Multi-Step |
| Problems with Whole |
| Numbers |
| Lesson 17: Write, interpret, and |
| compare numerical expressions. |
| 5.OA.A.1, 5.OA.A.2, MPG, |
| 5.Mod1.AD1, 5.Mod1.AD3, |
| 5.Mod1.AD4 |
| Lesson 18: Create and solve real- |
| world problems for given numerical |
| expressions. |
| 5.OA.A.1, 5.OA.A.2, MP2, |
| 5.Mod1.AD2, 5.Mod1.AD3 |
| Lesson 19: Solve multi-step word |
| problems involving multiplication |
| and division. |
| 5.OA.A.1, 5.OA.A.2, 5.NBT, MP4, |
| 5.Mod1.AD2, 5.Mod1.AD3, |
| 5.Mod1.AD5 |
| Lesson 20: Solve multi-step word |
| problems involving the four |
| operations. |
| 5.OA.A.1, 5.OA.A.2, 5.NBT, MP1, |
| 5.Mod11AD2, 5.Mod1.AD3, |
| 5.Mod1.AD5 |


| Lesson 17: Solve problems by | Lesson 17: Solve word problems |
| :--- | :--- |
| equally redistributing a total | involving fractions with |
| amount. | multiplication and division. |
| 5.NF.A.2, 5.MD.B.2, MP5, | 5.NF.B.6, 5.NF.B.7.c, MP1, |
| 5.Mod2.AD5, 5.Mod2.AD11 | 5.Mod3.AD10,5.Mod3.AD13 |

Topic D: Multi-Step Problems with Fractions

Lesson 18: Compare and evaluate expressions with parentheses. 5.OA.A.1, 5.OA.A.2, MP6, 5.Mod3.AD2, 5.Mod3.AD3, 5.Mod3.AD4

Lesson 19: Create and solve one-step word problems involving fractions. 5.NF.B.7.a, 5.NF.B.7.b, 5.NF.B.7.c, MP2, 5.Mod3.AD11, 5.Mod3.AD12, 5.Mod3.AD13

Lesson 20: Solve multi-step word problems involving fractions and write equations with parentheses. 5.NF, 5.NF.B.7.c, MP4,
5.Mod3.AD5, 5.Mod3.AD13

Lesson 21: Solve multi-step word problems involving fractions. 5.NF, 5.NF.B.6, 5.NF.B.7.c, MP4 5.Mod3.AD5, 5.Mod3.AD10, 5.Mod3.AD13

Lesson 22: Evaluate expressions involving nested grouping symbols. (Optional)
5.OA.A.1, MP6, 5.Mod3.AD1,
5.Mod3.AD2
5.NBT.B, 5.NBT.B.7, MP5,
5.Mod4.AD13, 5.Mod4.AD16, 5.Mod4.AD19

Lesson 18: Relate decimal-number multiplication to fraction
multiplication.
5.NBT.B.7, MP8, 5.Mod4.AD16, 5.NBT.B.7, MP8, 5.Mod4.AD16

Lesson 19: Multiply a decimal number by a decimal number. 5.NBT.B, 5.NBT.B.7, MP7, 5.Mod4.AD12, 5.Mod4.AD16, 5.Mod4.AD19

Topic D: Division of Decimal Numbers

Lesson 20: Divide decimal numbers to hundredths by one-digit whole numbers and multiples of 10,100 , or 1,000 by using unit form and place value understanding. 5.NBT.B, 5.NBT.B.7, MP7, 5.Mod4.AD12, 5.Mod4.AD17, 5.Mod4.AD12,
5.Mod4.AD18

Lesson 21: Divide decimal numbers to hundredths by one-digit whole numbers and multiples of 10,100 , or 1,000 by using place value understanding and vertical form. 5.NBT.B.7, MP3, 5.Mod4.AD17, 5.Mod4.AD19

Lesson 22: Divide decimal numbers to hundredths by two-digit whole numbers.
5.NBT.B, 5.NBT.B.7, MP5, 5.Mod4.AD13, 5.Mod4.AD17, 5.Mod4.AD19
5.MD.C.3, 5.MD.C.3.a,
5.MD.C.3.b, 5.MD.C.4, MP8, 5.Mod5.AD6, 5.Mod5.AD7

Lesson 20: Interpret volume as filling.
5.MD.C.3, 5.MD.C.3.a,
5.MD.C.3.b, MP2, 5.Mod5.AD6

Lesson 21: Relate volumes of solids and liquid volume.
5.MD.C.3, 5.MD.C.3.a, 5.MD.C.3.b, 5.MD.C.4, MP2, 5.Mod5.AD6, 5.Mod5.AD7

Topic D: Volume and the Operations of Multiplication and Addition

Lesson 22: Find the volumes of right rectangular prisms by using the area of the base. 5.MD.C.5, 5.MD.C.5.a, 5.MD.C.5.b, MP7, 5.Mod5.AD8, 5.Mod5.AD9, 5.Mod5.AD11

Lesson 23: Find the volumes of right rectangular prisms by multiplying the edge lengths. 5.MD.C.5.a, 5.MD.C.5.b, MP7, 5.Mod5.AD9, 5.Mod5.AD10, 5.Mod5.AD11

Lesson 24: Solve word problems involving volumes of right rectangular prisms.
5.MD.C.5, 5.MD.C.5.c, MP2, 5.Mod5.AD8, 5.Mod5.AD12

Lesson 25: Find the volumes of solid figures composed of right rectangular prisms.

Lesson 20: Reason about patterns in real-world situations. 5.OA.B.3, 5.G.A.2, MP4, 5.Mod6.AD1, 5.Mod6.AD2, 5.Mod6.AD4

|  |  |  | Lesson 23: Relate division by 0.1 and 0.01 to division by a unit fraction. <br> 5.NBT.B, 5.NBT.B.7, MP8, 5.Mod4.AD12, 5.Mod4.AD17, 5.Mod4.AD19 <br> Lesson 24: Divide decimal numbers by decimal numbers, resulting in whole-number quotients. <br> 5.NBT.B, 5.NBT.B.7, MP2, 5.Mod4.AD13, 5.Mod4.AD17, 5.Mod4.AD19 <br> Lesson 25: Divide decimal numbers by decimal numbers, resulting in decimal-number quotients. 5.NBT.B, 5.NBT.B.7, MP1, 5.Mod4.AD12, 5.Mod4.AD17, 5.Mod4.AD19 <br> Topic E: Applications of Decimals <br> Lesson 26: Solve a real-world problem involving metric measurements. (Optional) 5.MD.A.1, MP3, 5.Mod4.AD2O <br> Lesson 27: Convert metric measurements involving decimals. 5.MD.A.1, MP6, 5.Mod4.AD20 <br> Lesson 28: Convert customary measurements involving decimals. 5.MD.A.1, MP4, 5.Mod4.AD20 <br> Lesson 29: Interpret, evaluate, and compare numerical expressions involving decimals. | 5.MD.C.5.b, 5.MD.C.5.c, MP1, 5.Mod5.AD11, 5.Mod5.AD12 <br> Lesson 26: Solve word problems involving perimeter, area, and volume. <br> 5.MD.C.5.b, 5.MD.C.5.c, MP1, 5.Mod5.AD11, 5.Mod5.AD12 <br> Lesson 27: Apply concepts and formulas of volume to design a sculpture by using right rectangular prisms, part 1. <br> 5.MD.C.5.b, 5.MD.C.5.c, MP4, 5.Mod5.AD11, 5.Mod5.AD12 <br> Lesson 28: Apply concepts and formulas of volume to design a sculpture by using right rectangular prisms, part 2. <br> 5.MD.C.5.b, 5.MD.C.5.c, MP3, 5.Mod5.AD11, 5.Mod5.AD12 |
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|  |  |  | 5.OA.A.1, 5.OA.A.2, MP6, <br> 5.Mod4.AD1, 5.Mod4.AD2, <br> 5.Mod4.AD4 <br> Lesson 30: Create and solve realworld problems for given numerical expressions involving decimals. 5.OA.A.1, 5.OA.A.2, MP2, 5.Mod4.AD1, 5.Mod4.AD2, 5.Mod4.AD3 |  |
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