

Topic: Numbers and Operations in Base Ten

Key Learning: M03.A-T.1
 Use place value understanding and properties of operations to perform multi-digit arithmetic.
 CC.2.1.3.B.1

Unit Essential Question:
 How do I apply place value strategies to solve problems?

Assessment Anchor: M03.A-T.1.1.1 Concept: Round 2- and 3-digit whole numbers to the nearest ten or hundred.	Assessment Anchor: M03.A-T.1.1.2 Concept: Add & Subtract 2- and 3-digit whole numbers	Assessment Anchor: M03.A-T.1.1.3 Concept: Multiply 1-digit whole numbers by 2-digit multiples of 10.
Essential Question(s): How do you round two- and three-digit whole numbers to the nearest ten or hundred, respectively?	Essential Question(s): How do you add two- and three-digit whole numbers (limit sums from 100 through 1,000), and/or subtract two- and three-digit numbers from three-digit whole numbers?	Essential Question(s): How do you multiply one-digit whole numbers by two-digit multiples of 10 (from 10 through 90)?
Vocabulary: Round, Digits, Tens, Hundreds, Place Value	Vocabulary: Sums, Differences, Digits, Whole numbers	Vocabulary: Multiply, Multiples, Whole numbers, Tens

Assessment Anchor: M03.A-T.1.1.4 Concept: Order from least to greatest or greatest to least.	Concept:	Concept:
Essential Question(s): How do you order a set of whole numbers from least to greatest or greatest to least (up through 9,999; limit sets to no more than four numbers)?	Essential Question(s):	Essential Question(s):
Vocabulary: Sets, Least, Greatest, Thousands, Hundreds, Tens, Ones	Vocabulary:	Vocabulary:

Additional Information:

Topic: Numbers and Operations-Fractions

Key Learning: M03.A-F.1

Develop an understanding of fractions as numbers.

CC.2.1.3.C.1

Unit Essential Question:

How do you develop and apply number theory concepts to compare quantities and magnitudes of fractions and whole numbers?

<p>Assessment Anchor: M03.A-F.1.1.1 Concept:</p> <p>A whole or set is partitioned into y equal parts, the fraction $1/y$ represents 1 part of the whole and/or the fraction x/y represents x equal parts of the whole.</p>	<p>Assessment Anchor: M03.A-F.1.1.2 Concept:</p> <p>Represent fractions on a number line.</p>	<p>Assessment Anchor: M03.A-F.1.1.3 Concept:</p> <p>Recognize and generate simple equivalent fractions.</p> <p><i>Example 1: $1/2 = 2/4$</i> <i>Example 2: $4/6 = 2/3$</i></p>
<p>Essential Question(s):</p> <p>How do you demonstrate that when a whole or set is partitioned into y equal parts, the fraction $1/y$ represents 1 part of the whole and/or the fraction x/y represents x equal parts of the whole (limit the denominators to 2, 3, 4, 6, and 8; limit numerators to whole numbers less than the denominator; no simplification necessary)?</p>	<p>Essential Question(s):</p> <p>How do you represent fractions on a number line (limit the denominators to 2, 3, 4, 6, and 8; limit numerators to whole numbers less than the denominator; no simplification necessary)?</p>	<p>Essential Question(s):</p> <p>How do you recognize and generate simple equivalent fractions (limit the denominators to 1, 2, 3, 4, 6, and 8; limit numerators to whole numbers less than the denominator)?</p>
<p>Vocabulary:</p> <p>Fractions Numerator Denominator Parts of a whole Equal parts sets</p>	<p>Vocabulary:</p> <p>Fractions Number line Denominators Numerator Whole numbers</p>	<p>Vocabulary:</p> <p>Numerator Denominator Fractions Whole numbers Equivalent fractions</p>

Topic: Operations and Algebraic Thinking

Key Learning: M03.B-0.1
 Represent and solve problems involving multiplication and division.
 CC.2.2.3.A.1

Unit Essential Question:
 How do you understand various meanings of multiplication and division?

<p>Assessment Anchor: M03.B-0.1.2.1 Concept: Interpret and/or describe products of whole numbers (up to and including 10×10). <i>Example 1: Interpret 35 as the total number of objects in 5 groups, each containing 7 objects.</i> <i>Example 2: Describe a context in which a total number of objects can be expressed as 5×7.</i></p>	<p>Assessment Anchor: M03.B-0.1.2.2 Concept: Interpret and/or describe whole-number quotients of whole numbers (limit dividends through 50, and limit divisors and quotients through 10). <i>Example 1: Interpret $48 \div 8$ as the number of objects in each share when 48 objects are partitioned equally into 8 shares, or as a number of shares when 48 objects are partitioned into equal shares of 8 objects each.</i> <i>Example 2: Describe a context in which a number of shares or a number of groups can be expressed as $48 \div 8$.</i></p>	<p>Concept:</p>
<p>Essential Question(s): How do you interpret and/or describe products of whole numbers (up to and including 10×10)?</p>	<p>Essential Question(s): How do you interpret and/or describe whole-number quotients of whole numbers (limit dividends through 50, and limit divisors and quotients through 10)?</p>	<p>Essential Question(s):</p>
<p>Vocabulary: Whole numbers Products Multiply Interpret Sets/groups expressions</p>	<p>Vocabulary: Whole numbers Quotients Dividends Divisors Multiples</p>	<p>Vocabulary:</p>

Additional Information:

Topic: Operations & Algebraic Thinking

Key Learning: M03.B-0.1
 Represent and solve problems involving multiplication and division.
 CC.2.2.3.A.1

Unit Essential Question:
 How do you organize, display, and answer questions based on data?

Assessment Anchor: M03.B-0.1.2.1 Concept: Multiplication and Division with a Missing Number.	Assessment Anchor: M03.B-0.1.2.2 Concept: Multiplication and Division with a Missing Number.	Concept:
Essential Question(s): How do I use multiplication and/or division to solve word problems involving equal groups, arrays and/or measurement quantities?	Essential Question(s): How do I determine an unknown number in a multiplication and division word problem?	Essential Question(s):
Vocabulary: Equal groups Arrays	Vocabulary: Unknown numbers	Vocabulary:

Additional Information:

Topic: Operations and Algebraic Thinking

Key Learning: M03.B-0.2
 Understand properties of multiplication and relationship between multiplication and division.
 CC.2.2.3.A.2

Unit Essential Question:
 How do you use properties to simplify and solve multiplication problems?

Assessment Anchor: M03.B-0.2.2.1 Concept: Apply the commutative property of multiplication (not identification or definition of the property).	Assessment Anchor: M03.B-0.2.2.1 Concept: Apply the associative property of multiplication (not identification or definition of the property).	Concept:
Essential Question(s): How do you apply the commutative property of multiplication (not identification or definition of the property)?	Essential Question(s): How do you apply the associative property of multiplication (not identification or definition of the property)?	Essential Question(s):
Vocabulary: Commutative property of multiplication	Vocabulary: Associative property of multiplication	Vocabulary:

Concept:	Concept:	Concept:
Essential Question(s):	Essential Question(s):	Essential Question(s):
Vocabulary:	Vocabulary:	Vocabulary:

Additional Information:

Topic: Operations and Algebraic Thinking

Key Learning: M03.B-03.1

Solve problems involving the four operations, and identify and explain patterns in arithmetic.

CC.2.2.3.A.4

Unit Essential Question:

How do you use operations, patterns, and estimation strategies to solve problems (may include word problems)?

<p>Assessment Anchor: M03.B-0.3.1.1</p> <p>Concept:</p> <p>Solve two-step word problems using the four operations.</p>	<p>Assessment Anchor: M03.B-0.3.1.2</p> <p>Concept:</p> <p>Represent two-step word problems using equations with a symbol standing for the unknown quantity.</p>	<p>Assessment Anchor: M03.B-0.3.1.3</p> <p>Concept:</p> <p>Assess the reasonableness of answers.</p>
<p>Essential Question(s):</p> <p>How do you solve two-step word problems using the four operations (expressions are not explicitly stated). Limit to problems with whole numbers and having whole-number answers?</p>	<p>Essential Question(s):</p> <p>How do you represent two-step word problems using equations with a symbol standing for the unknown quantity. Limit to problems with whole numbers and having whole-number answers?</p>	<p>Essential Question(s):</p> <p>How do you assess the reasonableness of answers. Limit problems posed with whole numbers and having whole-number answers?</p>
<p>Vocabulary:</p> <p>Four operations, Problem solving, Whole numbers</p>	<p>Vocabulary:</p> <p>Problem solving, Word problems, Equations, Symbols</p>	<p>Vocabulary:</p> <p>Problem solving, Reasonableness, Whole numbers</p>

<p>Assessment Anchor: M03.B-0.3.1.4 Concept:</p> <p>Solve two-step equations using order of operations (equation is explicitly stated with no grouping symbols).</p>	<p>Assessment Anchor: M03.B-0.3.1.5 Concept:</p> <p>Identify arithmetic patterns and explain them using properties of operations.</p> <p><i>Example 1: Observe that 4 times a number is always even.</i> <i>Example 2: Explain why 6 times a number can be decomposed into three equal addends.</i></p>	<p>Assessment Anchor: M03.B-0.3.1.6 Concept:</p> <p>Create or match a story to a given combination of symbols (+, -, ×, ÷, <, >, =) and numbers.</p>
<p>Essential Question(s): How do you solve two-step equations using order of operations (equation is explicitly stated with no grouping symbols)?</p>	<p>Essential Question(s): How do you identify arithmetic patterns (including patterns in the addition table or multiplication table) and/or explain them using properties of operations?</p>	<p>Essential Question(s): How do you create or match a story to a given combination of symbols (+, -, ×, ÷, <, >, =) and numbers?</p>
<p>Vocabulary: Equations Grouping Problem solving Order of operations</p>	<p>Vocabulary: Arithmetic patterns Addition and multiplication tables Properties of operations decomposed</p>	<p>Vocabulary: Symbols Combination of symbols Order of symbols Problem solving</p>

<p>Assessment Anchor: M03.B-0.3.1.7 Concept:</p> <p>Identify the missing symbol (+, -, ×, ÷, <, >, =) that makes a number sentence true.</p>	<p>Concept:</p>	<p>Concept:</p>
<p>Essential Question(s): How do you identify the missing symbol (+, -, ×, ÷, <, >, =) that makes a number sentence true?</p>	<p>Essential Question(s):</p>	<p>Essential Question(s):</p>
<p>Vocabulary: Missing symbol Number sentence</p>	<p>Vocabulary:</p>	<p>Vocabulary:</p>

Topic: Geometry

Key Learning: M03.C-G.1
 Reason with shapes and their attributes.
 CC.2.3.3.A.1, CC.2.3.3.A.2

Unit Essential Question:
 How do you analyze characteristics of polygons?

<p>Assessment Anchor: M03.C-G.1.1.1 Concept: Explain that shapes in different categories may share attributes, and that the shared attributes can define a larger category. <i>Example 1: A rhombus and a rectangle are both quadrilaterals since they both have exactly four sides.</i> <i>Example 2: A triangle and a pentagon are both polygons since they are both multi-sided plane figures.</i></p>	<p>Assessment Anchor: M03.C-G.1.1.1 Concept: Recognize rhombi, rectangles, and squares as examples of quadrilaterals, and/or draw examples of quadrilaterals that do not belong to any of these subcategories.</p>	<p>Assessment Anchor: M03.C-G.1.1.1 Concept: Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. <i>Example 1: Partition a shape into 4 parts with equal areas.</i> <i>Example 2: Describe the area of each of 8 equal parts as 1/8 of the area of the shape.</i></p>
<p>Essential Question(s): How do you explain that shapes in different categories may share attributes, and that the shared attributes can define a larger category?</p>	<p>Essential Question(s): How do you recognize rhombi, rectangles, and squares as examples of quadrilaterals, and/or draw examples of quadrilaterals that do not belong to any of these subcategories?</p>	<p>Essential Question(s): How do you partition shapes into parts with equal areas? How do you express the area of each part as a unit fraction of the whole?</p>
<p>Vocabulary: Attributes, Categories, Shared attributes Polygons, Define</p>	<p>Vocabulary: Rhombi, Rectangles, Squares, Quadrilaterals, subcategories</p>	<p>Vocabulary: Partition, Area, Unit fraction of a whole</p>

<p>Concept:</p>	<p>Concept:</p>	<p>Concept:</p>
<p>Essential Question(s):</p>	<p>Essential Question(s):</p>	<p>Essential Question(s):</p>
<p>Vocabulary:</p>	<p>Vocabulary:</p>	<p>Vocabulary:</p>

Additional Information:

Topic: Measurement and Data

Key Learning: M03.D-M.1

Solve problems involving measurement and estimation of intervals of time, money, liquid, volumes, masses, and lengths of objects.

CC.2.4.3.A.2

Unit Essential Question:

How do you determine or calculate time and elapsed time?

Assessment Anchor: M03.D-M.1.1.1 Concept: Tell, show, and/or write time (analog) to the nearest minute.	Assessment Anchor: M03.D-M.1.1.2 Concept: Calculate elapsed time to the minute in a given situation.	Assessment Anchor: M03.D-M.1.1.3 Concept:
Essential Question(s): How do you tell, show, and/or write time (analog) to the nearest minute?	Essential Question(s): How do you calculate elapsed time to the minute in a given situation (total elapsed time limited to 60 minutes or less)?	Essential Question(s):
Vocabulary: Analog time, Nearest minute	Vocabulary: Calculate, Elapsed time, Sixty minutes	Vocabulary:

Concept:	Concept:	Concept:
Essential Question(s):	Essential Question(s):	Essential Question(s):
Vocabulary:	Vocabulary:	Vocabulary:

Additional Information:

Decision 1: Curriculum Map

Course: Math / 3

Topic: Measurement and Data

Key Learning: M03.D-M.1
 Solve problems involving measurement and estimation of intervals of time, money, liquid, volumes, masses, and lengths of objects.
 CC.2.4.3.A.2

Unit Essential Question:
 How do you use the attributes of liquid volume, mass, and length of objects?

Assessment Anchor: M03.D-M.1.2.1 Concept: Measure and estimate liquid volumes and masses of objects.	Assessment Anchor: M03.D-M.1.2.2 Concept: Add, subtract, multiply, and divide to solve one step word problems involving masses or liquid volumes.	Assessment Anchor: M03.D-M.1.2.3 Concept: Use a ruler to measure lengths to the nearest quarter inch or centimeter.
Essential Question(s): How do you measure and estimate liquid volumes and masses of objects using standard units (cups [c], pints [pt], quarts [qt], gallons [gal], ounces [oz.], and pounds [lb]) and metric units (liters [l], grams [g], and kilograms [kg])?	Essential Question(s): How do you add, subtract, multiply, and divide to solve one step word problems involving masses of liquid volumes that are given in the same units?	Essential Question(s): How do you use a ruler to measure lengths to the nearest quarter inch or centimeter?
Vocabulary: Liquid volumes, Masses of objects, Standard units, Metric units	Vocabulary: Problem solving, Liquid volume, mass	Vocabulary: Inches, Centimeters, Ruler, length

Concept:	Concept:	Concept:
Essential Question(s):	Essential Question(s):	Essential Question(s):
Vocabulary:	Vocabulary:	Vocabulary:

Additional Information:

Topic: Measurement and Data

Key Learning: M03.D-M.1
 Represent and interpret data
 CC.2.4.3.A.3

Unit Essential Question:
 How do you organize, display, and answer questions based on data?

<p>Assessment Anchor: M03.D-M.1.3.1 Concept: Complete a scaled pictograph and a scaled bar graph to represent a data set with several categories (scales limited to 1, 2, 5, and 10).</p>	<p>Assessment Anchor: M03.D-M.1.3.2 Concept: Solve 1- and 2-step problems using information from pictographs and scaled bar graphs. <i>Example 1: (One-step) "Which category is the largest?"</i> <i>Example 2: (Two-step) "How many more are in category A than in category B?"</i></p>	<p>Assessment Anchor: M03.D-M.1.3.3 Concept: Measuring lengths using rulers marked with halves and fourths of an inch..</p>
<p>Essential Question(s): How do you complete a scaled pictograph and a scaled bar graph to represent a data set with several categories (scales limited to 1, 2, 5, and 10)?</p>	<p>Essential Question(s): How do you solve one- and two-step problems using information to interpret data presented in scaled pictographs and scaled bar graphs (scales limited to 1, 2, 5, and 10)?</p>	<p>Essential Question(s): How do you generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Display the data by making a line plot, where the horizontal scale is marked in appropriate units—whole numbers, halves, or quarters?</p>
<p>Vocabulary: Pictograph Bar graph Data set scales</p>	<p>Vocabulary: Problem solving Pictograph Scaled bar graph Interpret data</p>	<p>Vocabulary: Measurement Lengths Halves Fourths Horizontal scales</p>

<p>Assessment Anchor: M03.D-M.1.3.4</p> <p>Concept:</p> <p>Translate pictographs, tally charts, bar graphs, and tables.</p> <p><i>Example: Convert a tally chart to a bar graph.</i></p>	<p>Concept:</p>	<p>Concept:</p>
<p>Essential Question(s):</p> <p>How do you translate information from one type of display to another. Limit to pictographs, tally charts, bar graphs, and tables?</p>	<p>Essential Question(s):</p>	<p>Essential Question(s):</p>
<p>Vocabulary:</p> <p>Tally charts Bar graphs Pictographs Translate information convert</p>	<p>Vocabulary:</p>	<p>Vocabulary:</p>

Additional Information:

Topic: Measurement and Data

Key Learning: M03.D-M.3
 Geometric measurement: understand concepts of area and relate area to multiplication and to addition.
 CC.2.4.3.A.5

Unit Essential Question:
 How do you find the areas of plane figures?

<p>Assessment Anchor: M03.D-M.3.1.1 Concept: Measure areas by counting unit squares (square cm, square m, square in., square ft, and non-standard square units).</p>	<p>Assessment Anchor: M03.D-M.3.1.2 Concept: 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.</p>	<p>Assessment Anchor: M03.D-M.3.1.3 Concept:</p>
<p>Essential Question(s): How do you measure areas by counting unit squares (square cm, square m, square in., square ft, and non-standard square units)?</p>	<p>Essential Question(s): How do you 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?</p>	<p>Essential Question(s):</p>
<p>Vocabulary: Measure Squares-feet, inches, meters, feet Non standard square units</p>	<p>Vocabulary: Problem solving Real world problem solving Rectangular areas Whole-number products</p>	<p>Vocabulary:</p>

Additional Information:

Topic: Measurement and Data

Key Learning: M03.D-M.4.1
 Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.
 CC.2.4.3.A.6

Unit Essential Question:
 How do you find and use the perimeters of plane figures?

Assessment Anchor: M03.D-M.4.1.1 Concept: Perimeters of polygons.	Concept:	Concept:
Essential Question(s): How do you solve real-world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, exhibiting rectangles with the same perimeter and different areas, and exhibiting rectangles with the same area and different perimeters? Use the same units throughout the problem?	Essential Question(s):	Essential Question(s):
Vocabulary: Polygons Perimeter Area	Vocabulary:	Vocabulary:

Additional Information:

Topic: Measurement and Data MO3.D-M.1

Key Learning: M03.D-M.1
 Solve problems involving measurement and estimation of intervals of time, money, liquid, volumes, masses, and lengths of objects.
 CC.2.4.3.A.3

Unit Essential Question:
 How do you count, compare, and make change using a collection of coins and one-dollar bills?

<p>Assessment Anchor: M03.D-M.1.3.1 Concept: Compare total values of combinations of coins (penny, nickel, dime, quarter) and/or dollar bills less than \$5.00.</p>	<p>Assessment Anchor: M03.D-M.1.3.2 Concept: Make change for an amount up to \$5.00 with no more than \$2.00 change given (penny, nickel, dime, quarter, and dollar).</p>	<p>Assessment Anchor: M03.D-M.1.3.3 Concept: Round amounts of money to the nearest dollar.</p>
<p>Essential Question(s): How do you compare total values of combinations of coins (penny, nickel, dime, quarter) and/or dollar bills less than \$5.00?</p>	<p>Essential Question(s): How do you make change for an amount up to \$5.00 with no more than \$2.00 change given (penny, nickel, dime, quarter, and dollar)?</p>	<p>Essential Question(s): How do you round amounts of money to the nearest dollar?</p>
<p>Vocabulary: Combinations of coins Penny, nickel, dime, quarter, dollar bills- 5, 1</p>	<p>Vocabulary: Making change</p>	<p>Vocabulary: Round Money Nearest dollar</p>

<p>Concept:</p>	<p>Concept:</p>	<p>Concept:</p>
<p>Essential Question(s):</p>	<p>Essential Question(s):</p>	<p>Essential Question(s):</p>
<p>Vocabulary:</p>	<p>Vocabulary:</p>	<p>Vocabulary:</p>

Topic: Measurement and Data

Key Learning: M03.D-M.2
 Represent and interpret data
 CC.2.4.3.A.4

Unit Essential Question:
 How do you organize, display, and answer questions based on data?

<p>Assessment Anchor: M03.D-M.2.1.1 Concept: Complete a scaled pictograph and a scaled bar graph to represent a data set with several categories.</p>	<p>Assessment Anchor: M03.D-M.2.1.2 Concept: Solve 1- and 2-step problems using information from pictographs and scaled bar graphs (scales limited to 1, 2, 5, and 10). <i>Example 1: (One-step) "Which category is the largest?"</i> <i>Example 2: (Two-step) "How many more are in category A than in category B?"</i></p>	<p>Assessment Anchor: M03.D-M.2.1.3 Concept: Measuring lengths using rulers marked with halves and fourths of an inch..</p>
<p>Essential Question(s): How do you complete a scaled pictograph and a scaled bar graph to represent a data set with several categories (scales limited to 1, 2, 5, and 10)?</p>	<p>Essential Question(s): How do you solve one- and two-step problems using information to interpret data presented in scaled pictographs and scaled bar graphs (scales limited to 1, 2, 5, and 10)?</p>	<p>Essential Question(s): How do you generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Display the data by making a line plot, where the horizontal scale is marked in appropriate units—whole numbers, halves, or quarters?</p>
<p>Vocabulary: Pictograph Bar graph Data set scales</p>	<p>Vocabulary: Problem solving Pictograph Scaled bar graph Interpret data</p>	<p>Vocabulary: Measurement Lengths Halves Fourths Horizontal scales</p>

<p>Assessment Anchor: M03.D-M.2.1.4</p> <p>Concept:</p> <p>Translate information from one type of display to another. Limit to pictographs, tally charts, bar graphs, and tables.</p> <p><i>Example: Convert a tally chart to a bar graph.</i></p>	<p>Concept:</p>	<p>Concept:</p>
<p>Essential Question(s):</p> <p>How do you translate information from one type of display to another? Limit to pictographs, tally charts, bar graphs, and tables?</p>	<p>Essential Question(s):</p>	<p>Essential Question(s):</p>
<p>Vocabulary:</p> <p>Tally charts Bar graphs Pictographs Translate information convert</p>	<p>Vocabulary:</p>	<p>Vocabulary:</p>

Additional Information: