

Topic: Number and Operations

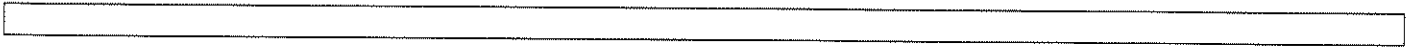
Key Learning: M05.A-F.1
 Use equivalent fractions as a strategy to add and subtract fractions.
 CC.2.1.5.C.1

Unit Essential Question:
 How do we solve addition and subtraction problems involving fractions?

Assessment Anchor: M05.A-F.1.1.1 Concept: Add and subtract fractions (including mixed numbers) with unlike denominators. (May include multiple methods and representations.)	Concept:	Concept:
Essential Question(s): How do we add and subtract fractions with like and unlike denominators?	Essential Question(s):	Essential Question(s):
Vocabulary: Fraction proper fraction mixed number improper fraction numerator denominator greatest common factor (GCF) equivalent fraction	Vocabulary:	Vocabulary:

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

Additional Information:



Topic: Number and Operations

Key Learning: M05.A-F.2

Apply and extend previous understands of multiplication and division to multiply and divide fractions.

CC.2.1.5.C.2

Unit Essential Question:

How do we solve multiplication and division problems involving fractions and whole numbers?

Assessment Anchor: M05.A-F.2.1.1 Concept: Quotients with Remainders as Fractions	Assessment Anchor: M05.A-F.2.1.1 Concept: Multiply fraction (including mixed numbers) by a fraction.	Assessment Anchor: M05.A-F.2.1.1 Concept: Demonstrate an understanding of multiplication as scaling (resizing).
Essential Question(s): How do we solve word problems involving division of whole numbers that lead to answers containing fractions?	Essential Question(s): How do we multiply a fraction by a fraction?	Essential Question(s): How do we use multiplication of fractions to demonstrate scaling (resizing)?
Vocabulary: mixed numbers	Vocabulary: least common denominator (LCD)	Vocabulary: scale

Assessment Anchor: M05.A-4.2.1.4 Concept: Divide unit fractions by whole numbers and whole numbers by unit fractions.	Concept:	Concept:
Essential Question(s): What strategies are used for dividing fractions?	Essential Question(s):	Essential Question(s):
Vocabulary: reciprocal	Vocabulary:	Vocabulary:

Additional Information:

Topic: Number and Operations in Base Ten

Key Learning: M05.A-T.1
 Understand the place value system.
 CC.2.1.5.B.1

Unit Essential Question:
 How do we use place value of whole numbers and decimals to compare quantities or magnitudes of numbers?

<p>Assessment Anchor: M05.A-T.1.1.1 Concept: Demonstrate an understanding that in a multi-digit number, a digit in one place represents $\frac{1}{10}$ of what it represents in the place to its left.</p>	<p>Assessment Anchor: M05.A-T.1.1.2 Concept: 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>Assessment Anchor: M05.A-T.1.1.3 Concept: Read and write decimals to thousandths using base-ten numerals, word form, and expanded form.</p>
<p>Essential Question(s): How do we know the place value of a digit in a given location?</p>	<p>Essential Question(s): How do we use patterns to show the placement of the decimal point when multiplied or divided by a power of 10?</p>	<p>Essential Question(s): How do we read and write decimal numbers in word and expanded form?</p>
<p>Vocabulary: place value, digit, whole number, period</p>	<p>Vocabulary: Exponent, decimal number, decimal point</p>	<p>Vocabulary: expanded notation, standard form, word form</p>

<p>Assessment Anchor: M05.A-T.1.1.4 Concept: Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols.</p>	<p>Assessment Anchor: M05.A-T.1.1.5 Concept: Round decimals to any place (limit rounding to ones, tenths, hundredths, or thousandths place.)</p>	<p>Concept:</p>
<p>Essential Question(s): How do we compare and order decimal numbers?</p>	<p>Essential Question(s): How do we round decimal numbers?</p>	<p>Essential Question(s):</p>
<p>Vocabulary: comparison</p>	<p>Vocabulary: Tenths, hundredths, thousandths</p>	<p>Vocabulary:</p>

Additional Information:

Topic: Operations and Algebraic Thinking

Key Learning: M05.B-O.1

Write and interpret numerical expressions.

CC2.2.5.A.1

Unit Essential Question:

How do we analyze and complete calculations by applying the order of operations?

<p>Assessment Anchor: M05.B-O.1.1.1 Concept: Use multiple grouping symbols (parentheses, brackets, or braces) in numerical expressions, and evaluate expressions containing these symbols.</p>	<p>Assessment Anchor: M05.B-O.1.1.2 Concept: Write simple expressions that model calculations with numbers, and interpret numerical expressions without evaluating them. <i>Ex: "Add 8 and 7 then multiply by 2" as $(8 + 7) \times 2$</i></p>	<p>Concept:</p>
<p>Essential Question(s): How does using grouping symbols (parentheses, brackets, or braces) change the value of the equation?</p>	<p>Essential Question(s): How do we interpret numerical expressions without evaluating them?</p>	<p>Essential Question(s):</p>
<p>Vocabulary: Order of operations PEMDAS</p>	<p>Vocabulary:</p>	<p>Vocabulary:</p>

Additional Information:

Topic: Operations and Algebraic Thinking

Key Learning: M05.B-0.2
 Analyze patterns and relationships.
 CC.2.2.5.A.4

Unit Essential Question:
 How do we create, extend and analyze patterns?

<p>Assessment Anchor: M05.B-0.2.1.1 Concept: Generate two separate numerical patterns using two given rules.</p>	<p>Assessment Anchor: M05.B-0.2.1.1 Concept: Identify apparent relationships between corresponding terms of two patterns with the same starting numbers that follow different rules.</p>	<p>Concept:</p>
<p>Essential Question(s): How do we generate two separate numerical patterns using two given rules? How are patterns completed and/or extended?</p>	<p>Essential Question(s): What is the process used to identify apparent relationships between corresponding terms of two patterns with the same starting numbers that follow different rules?</p>	<p>Essential Question(s):</p>
<p>Vocabulary: Pattern, element, rule, function, repetition, sequence</p>	<p>Vocabulary:</p>	<p>Vocabulary:</p>

Additional Information:

Topic: Geometry

Key Learning: M05.C-G.1
 Graph points on the coordinate plane to solve real-world and mathematical problems.
 CC.2.3.5.A.1

Unit Essential Question:
 How do we identify parts of a coordinate grid, and describe or interpret points given an ordered pair?

<p>Assessment Anchor: M05.C-G.1.1.1 Concept: Coordinate Plane and ordered pairs</p>	<p>Assessment Anchor: M05.C-G.1.1.2 Concept: Use plotted points to solve real world problems</p>	<p>Concept:</p>
<p>Essential Question(s): What are the steps used to identify parts of the coordinate plane (x-axis, y-axis, and the origin) and the ordered pair (x-coordinate and y-coordinate). Limit the coordinate plane to quadrant I.</p>	<p>Essential Question(s): How can we represent real-world and mathematical problems by plotting points in quadrant I of the coordinate plane, and interpret coordinate values of points in the context of the situation?</p>	<p>Essential Question(s):</p>
<p>Vocabulary: Coordinate Plane Ordered Pairs</p>	<p>Vocabulary:</p>	<p>Vocabulary:</p>

Additional Information:

Topic: Geometry

Key Learning: M05.C-G.2
 Classify two-dimensional figures into categories based on their properties.
 CC.2.3.5.A.2

Unit Essential Question:
 How do we use basic properties to classify two-dimensional figures?

Assessment Anchor: M05.C-G.2.1.1 Concept: Classifying figures	Concept:	Concept:
Essential Question(s): What are the characteristics and properties of two-dimensional figures?	Essential Question(s):	Essential Question(s):
Vocabulary: Two-dimensional, plane, scalene, equilateral, isosceles, polygon, regular polygon	Vocabulary:	Vocabulary:

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

Additional Information:

Topic: Measurement and Data

Key Learning: M05.D-M.1

Convert like measurement units within a given measurement system.

CC.2.4.5.A.1

Unit Essential Question:

How do we solve problems using simple conversions (may include multistep, real-world problems)?

Assessment Anchor: M05.D-M.1.1.1 Concept: Converting Measurement Units	Concept:	Concept:
Essential Question(s): How do we convert among different-sized measurement units within a given measurement system?	Essential Question(s):	Essential Question(s):
Vocabulary: Measurement system Metric system U.S. Customary Linear measurement	Vocabulary:	Vocabulary:

Additional Information:

Topic: Measurement and Data

Key Learning: M05.D-M.2
 Represent and interpret data.
 CC.2.4.5.A.2, CC.2.4.5.A.4

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

<p>Assessment Anchor: M05.D-M.2.1.1 Concept: Solve problems using fractions and a plot line</p>	<p>Assessment Anchor: M05.D-M.2.1.2 Concept: Display data on a given grid</p>	<p>Assessment Anchor: M05.D-M.2.12 Concept: Interpret Data</p>
<p>Essential Question(s): What steps are used to solve problems involving computation of fractions by using information presented in line plots?</p>	<p>Essential Question(s): How do we display data using tallies, tables, charts, pictographs, bar graphs, and line graphs, and use a title, appropriate scale, and labels?</p>	<p>Essential Question(s): How can mean, median, range and mode be used to interpret data?</p>
<p>Vocabulary: Line plots</p>	<p>Vocabulary: Tallies, Charts, Tables, Pictographs, Bar graphs, line graphs, Scale, Title, Labels</p>	<p>Vocabulary:</p>

Additional Information:

Topic: Measurement and Data

Key Learning: M05.D-M.3
 Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.
 CC.2.4.5.A.5

Unit Essential Question:
 How do we use, describe, and develop procedures to solve problems involving volume?

Assessment Anchor: M05.D-M.3.1.1 Concept: Applying formulas	Assessment Anchor: M05.D-M.3.1.2 Concept: Find volumes of solid figures	Concept:
Essential Question(s): How do we 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?	Essential Question(s): What is the process to find volumes of solid figures composed of two non-overlapping right rectangular prisms?	Essential Question(s):
Vocabulary: Formulas Rectangular prisms Edges	Vocabulary: Volume	Vocabulary:

Additional Information: