

Student Learning Map

Grade/Course: 5 / Math

Unit: Adding and Subtracting Fractions

Key Learning: Knowledge of adding and subtracting fractions in straight computational or words problems is essential.

Unit Essential Question:
How do I add and subtract fractions?

Lesson Topic 1:
Adding Fractions

Lesson Topic 2:
Subtracting Fractions

Lesson Topic 3:
Word Problems

Lesson Essential Questions:

1. How do I add fractions with like denominators? CC.2.1.5.C.1
2. What are the steps needed to add unlike denominators? CC.2.1.5.C.1
3. How do I add mixed numbers with like or unlike denominators? CC.2.1.5.C.1

Lesson Essential Questions:

1. How do I subtract fractions with like denominators? CC.2.1.5.C.1
2. What are the steps needed to subtract unlike denominators? CC.2.1.5.C.1
3. How do I subtract mixed numbers with like or unlike denominators? CC.2.1.5.C.1

Lesson Essential Questions:

1. Why is it important to use problem-solving strategies to find the answer to a word problem that uses fractions? CC.2.1.5.C.1

Vocabulary:

Computation
Fractions
Mixed numbers
Like denominators
Unlike denominators
Numerator
Improper fraction
Equivalent

Vocabulary:

Vocabulary:

Revised: 1/17/14

Student Learning Map

Grade/Course: 5 / Math

Unit: **Converting Measurement**

Key Learning: Solving problems using simple conversions (including multi-step, and real-world problems) is essential.

Unit Essential Question:
How do I solve problems using conversions?

Lesson Topic 1:
Customary Measurement

Lesson Topic 2:
Metric Measurement

Lesson Topic 3:
Measurement Problem Solving

Lesson Essential Questions:

1. How do we convert customary units of length? CC.2.4.5.A.3
2. How do we convert customary units of weight? CC.2.4.5.A.3
3. How do we convert customary units of capacity? CC.2.3.4.A.4

Lesson Essential Questions:

1. How do we convert metric units of length? CC.2.4.5.A.3
2. How do we convert metric units of weight? CC.2.4.5.A.3
3. How do we convert metric units of capacity? CC.2.3.4.A.4

Lesson Essential Questions:

1. What are the steps to solve multi-step problems containing measurement conversion? CC.2.4.5.A.3
2. What are the steps to solve real-world problems containing measurement conversion? CC.2.4.5.A.3

Vocabulary:

Length	Ounces
Capacity	Fl. Ounce
Mass	Cup
Inch	Pint
Foot	Quart
Yard	Gallon
Mile	
Pound	
Ton	

Vocabulary:

Meter
Gram
Liter
Kilo
Deci
Centi
Milli

Vocabulary:

Revised: 1/17/14

Student Learning Map

Grade/Course: 5 / Math

Unit: Geometric Measurement

Key Learning: Using, describing, and developing procedures to solve problems involving volume is essential.

Unit Essential Question:
How do I solve problems involving volume?

Lesson Topic 1:
Finding Volume

Lesson Topic 2:
Finding Volume of Non-overlapping Rectangular Prisms

Lesson Topic 3:

Lesson Essential Questions:
1. What are the steps to find the volume of a rectangular prism?
CC.2.4.5.A.5

Lesson Essential Questions:
1. How do I use a formula to find the volume of two non-overlapping right rectangular prisms?
CC.2.4.5.A.5

Lesson Essential Questions:

Vocabulary:

$V = l \times w \times h$
Volume
Length
Width
Height
Prism
Formula

Vocabulary:

Non-overlapping right rectangular prism

Vocabulary:

Revised: 1/17/14

Student Learning Map

Grade/Course: 5 / Math

Unit: **Graph Points on the Coordinate Plane**

Key Learning: Identifying parts of a coordinate grid, and describing or interpreting points given in an ordered pair are essential.

Unit Essential Question:
What are the parts of a coordinate grid, and how do we use them to interpret data?

Lesson Topic 1: Parts of the Coordinate Plane	Lesson Topic 2: Ordered Pairs	Lesson Topic 3: Plotting and Interpreting Points
---	---	--

Lesson Essential Questions: 1. What are the parts of the coordinate plane? CC.2.3.5.A.1	Lesson Essential Questions: 1. What is an ordered pair? CC.2.34.5.A.1 2. How do I find an ordered pair on a coordinate plane? CC.2.34.5.A.1	Lesson Essential Questions: 1. How do I plot a point in the first quadrant of a coordinate plane? CC.2.3.5.A.1 2. What are the steps to solve real world problems using data on a coordinate plane? CC.2.34.5.A.1
---	--	--

Vocabulary: coordinate plane x-axis y-axis quadrant scale	Vocabulary: ordered pair	Vocabulary: quadrant
---	------------------------------------	--------------------------------

Revised: 1/17/14

Student Learning Map

Grade/Course: 5 / Math

Unit: **Multiply and Divide Fractions**

Key Learning: The ability to solve multiplication and division problems involving fractions and whole numbers is essential.

Unit Essential Question:
How do I multiply and divide problems that use fractions and whole numbers?

Lesson Topic 1:
Interpreting Remainder as a Fraction

Lesson Topic 2:
Multiply Fractions

Lesson Topic 3:
Divide Fractions

Lesson Essential Questions:

1. How do I interpret the remainder as a fraction when dividing whole numbers?
CC.2.1.5.C.2
2. How do I solve word problems, and interpret the remainder as a fraction?
CC.2.1.5.C.2

Lesson Essential Questions:

1. How do I multiply two fractions? CC.2.1.5.C.2
2. How do I multiply mixed numbers? CC.2.1.5.C.2
3. What are the steps for multiplying fractions using scaling?
CC.2.1.5.C.2

Lesson Essential Questions:

1. How do I divide a fraction by a whole number? CC.2.1.5.C.2
2. How do I divide a whole number by a fraction?
CC.2.1.5.C.2

Vocabulary:

Vocabulary:

Mixed numbers
Improper fractions

Vocabulary:

Revised: 1/17/14

Student Learning Map

Grade/Course: 5 / Math

Unit: Numerical Expressions

Key Learning: Analyzing and completing calculations by applying the order of operations is essential.

Unit Essential Question:
How do I solve a problem by applying the order of operations?

Lesson Topic 1:
Order of Operations

Lesson Topic 2:
Grouping Symbols

Lesson Topic 3:
Numerical Expressions

Lesson Essential Questions:
1. How do I use the order of operations to solve a problem?
CC.2.2.5.A.1

Lesson Essential Questions:
1. What process do we use to solve multiple grouping symbols?
CC.2.2.5.A.1

Lesson Essential Questions:
1. How do I write a simple expression? CC.2.2.5.A.1
2. How do I interpret the operation of a numerical expression?
CC.2.2.5.A.1

Vocabulary:
PEMDAS
Parenthesis

Vocabulary:
Brackets
Braces

Vocabulary:
Expressions
Numerical Expressions

Revised: 1/17/14

Student Learning Map

Grade/Course: 5 / Math

Unit: Operations with Whole Numbers and Decimals

Key Learning: Using whole numbers and decimals to compute accurately is essential.

Unit Essential Question:
How do I solve problems that use whole numbers and decimals?

Lesson Topic 1:
Multiply Whole Numbers

Lesson Topic 2:
Divide Whole Numbers

Lesson Topic 3:
Adding, Subtracting,
Multiplying, and Dividing
Decimals

Lesson Essential Questions:
1. How do I multiply whole numbers up to a 3-digit factor?
CC.2.1.5.B.2

Lesson Essential Questions:
1. How do I find a quotient with a single digit divisor with up to a 4-digit dividend? CC.2.1.5.B.2

2. How do I find a quotient with a two-digit divisor with up to a 4-digit dividend? CC.2.1.5.B.2

Lesson Essential Questions:
1. How do I add or subtract decimals to the hundredths place?
CC.2.1.5.B.2

2. How do I multiply decimals to the hundredths place?
CC.2.1.5.B.2

3. How do I divide decimals to the hundredths place? CC.2.1.5.B.2

Vocabulary:
Factor
Product
2-digit
3-digit
4-digit
Multiply

Vocabulary:
Quotient
Dividend
Divisor
Divide

Vocabulary:
Addend
Sum
Difference

Note: For more concepts, use this same template but change Lesson Topic #. Remember to save new unit files under a different name.

Student Learning Map

Grade/Course: 5 / Math

Unit: **Patterns and Relationships**

Key Learning: Creating, extending, and analyzing patterns essential.

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

Lesson Topic 1:
Creating Patterns

Lesson Topic 2:
Identifying Relationships
Between Patterns

Lesson Topic 3:

Lesson Essential Questions:
1. How do I create numerical
patterns using at least two rules?
CC.2.2.5.A.4

Lesson Essential Questions:
1. How do I identify relationships
between two patterns with different
rules? CC.2.2.5.A.4

Lesson Essential Questions:

Vocabulary:
Numerical Patterns

Vocabulary:
Relationships

Vocabulary:

Revised: 1/17/14

Student Learning Map

Grade/Course: 5 / Math

Unit: Place Value Systems

Key Learning: Demonstrating a knowledge of place value of whole numbers, decimals, and comparing quantities is essential.

Unit Essential Question:
How do we demonstrate a knowledge of place value using whole numbers decimals?

<p>Lesson Topic 1: Reading, Writing, and Understanding Whole Numbers and Decimals in Place Value</p>	<p>Lesson Topic 2: Patterns in Place Value</p>	<p>Lesson Topic 3: Comparing and Rounding Decimals</p>
---	---	---

<p>Lesson Essential Questions: 1. How do I read, write, and demonstrate an understanding of multi-digit whole numbers? CC.2.1.5.B.1 2. How do I read and write a decimal to the thousandths using standard, word, and expanded form? CC.2.1.5.B.1</p>	<p>Lesson Essential Questions: 1. What is the zero pattern when multiplying by a power of 10 to find a product? CC.2.1.5.B.1 2. What are the steps to place a decimal when multiplying by a power of 10? CC.2.1.5.B.1 3. How do I use exponents to show powers of 10? CC.2.1.5.B.1</p>	<p>Lesson Essential Questions: 1. How do I compare decimals to the thousandths place using symbols (<, >, =)? CC.2.1.5.B.1 2. What are the steps to round decimals? CC.2.1.5.B.1</p>
---	---	--

<p>Vocabulary: Multi-digit Digit Place value Expanded form Word form Ones Tens Hundreds Thousands</p>	<p>Vocabulary: Ten thousands Hundred th. Millions Tenths Hundredths Thousandths</p> <p>Vocabulary: Exponents Powers of 10</p>	<p>Vocabulary: Symbols (<, >, =) Rounding</p>
--	---	--

Revised: 1/17/14

Student Learning Map

Grade/Course: 5 / Math

Unit: **Represent and Interpret Data**

Key Learning: Organizing, displaying, and answering questions based on data is essential.

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

Lesson Topic 1:
Interpreting Data

Lesson Topic 2:
Displaying Data

Lesson Topic 3:
Line Plots

Lesson Essential Questions:

1. How do I interpret data from tallies, tables, and charts?
CC.2.4.5.C.2 CC.2.4.5.A.4
2. How do I interpret data using a pictograph?
CC.2.4.5.C.2
CC.2.4.5.A.4
3. How do I interpret data using a line or bar graph?
CC.2.4.5.C.2
CC.2.4.5.A.4

Lesson Essential Questions:

1. How do I display data using tallies, tables, and charts?
CC.2.4.5.C.2 CC.2.4.5.A.4
2. How do I display data using a picto, bar, or line graph?
CC.2.4.5.C.2 CC.2.4.5.A.4
3. How do I display data using a title, appropriate scale, and labels?
CC.2.4.5.C.2 CC.2.4.5.A.4

Lesson Essential Questions:

1. How do I interpret a line plot?
CC.2.4.5.C.2 CC.2.4.5.A.4
2. How do I find fractional parts based on information from a line plot?
CC.2.4.5.C.2 CC.2.4.5.A.4

Vocabulary:

Tallies
Scales
Tables
Charts
Pictograph
Bar graph
Line graph
Title
Label

Vocabulary:

Vocabulary:

Line plot

Note: For more concepts, use this same template but change Lesson Topic #. Remember to save new unit files under a different name.

Student Learning Map

Grade/Course: 5 / Math

Unit: **Two-dimensional Figures**

Key Learning: Using basic properties to classify two-dimensional figures is essential.

Unit Essential Question:
How do I classify two-dimensional figures using properties?

Lesson Topic 1: Two-dimensional Figures	Lesson Topic 2:	Lesson Topic 3:
---	------------------------	------------------------

Lesson Essential Questions: 1. How do we identify two-dimensional figures using properties? CC.2.3.5.A.2 2. How do we compare the properties of quadrilateral to other two-dimensional figures? CC.2.3.5.A.2	Lesson Essential Questions:	Lesson Essential Questions:
---	------------------------------------	------------------------------------

Vocabulary: Polygon Pentagon Quadrilateral Rectangle Parallelogram 2 dimensional Octagon Trapezoid Heptagon	Vocabulary:	Vocabulary:
---	--------------------	--------------------

Note: For more concepts, use this same template but change Lesson Topic #. Remember to save new unit files under a different name.