

**RATIOS AND PROPORTIONS - Understand ratio concepts and use ratio reasoning to solve problems**

6.RP.1. Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.

**EE6.RP.1.** Demonstrate a simple ratio relationship.

4	Use a ratio to describe a relationship using numbers and objects.
3	Demonstrate a simple ratio relationship.
2	Complete a pattern given a simple ratio.
1	Identify a one-to-one relationship.

**THE NUMBER SYSTEM - Apply and extend previous understandings of multiplication and division to divide fractions by fractions**

6.NS.1. Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions,

**EE6.NS.1.** Compare the relationships between two unit fractions.

4	Compare the relationships between the three unit fractions ( $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{8}$ ).
3	Compare the relationships between two unit fractions.
2	Demonstrate an amount of $\frac{1}{2}$ .
1	Distinguish between more or less.

**THE NUMBER SYSTEM - Compute fluently with multi-digit numbers and find common factors and multiples**

6.NS.2. Fluently divide multi-digit numbers using the standard algorithm.

**EE6.NS.2.** Apply the concept of fair share and equal shares to divide.

4	Solve a division problem using the concept of equal shares.
3	Apply the concept of fair share and equal shares to divide.
2	Identify the concept of division using fair and equal shares.
1	Replicate equal sets.

6.NS.3. Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.

**EE6.NS.3.** Solve two factor multiplication problems with products up to 50 using concrete objects and/or calculators.

4	Solve multiplication problems with whole number products to 50 using numerical representations.
3	Solve two factor multiplication problems with products up to 50 using concrete objects and/or calculators.
2	Solve repeated addition problems where the addends are the same (i.e., $5 + 5 + 5 = 15$ is equal to three groups of five) using concrete manipulatives and/or a calculator.
1	Identify a group of a given quantity.

**THE NUMBER SYSTEM - Apply and extend previous understandings of numbers to the system of rational numbers**

6.NS.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.

**EE6.NS.5-8.** Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero).

4	Apply positive and negative numbers to a real-world context from greater than positive 10 and less than negative 10.
3	Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero).
2	Order positive numbers from least to greatest.
1	Identify which is greater than and less than using fewer than 10.

**EXPRESSIONS AND EQUATIONS - Apply and extend previous understandings of arithmetic to algebraic expressions**

6.EE.1. Write and evaluate numerical expressions involving whole-number exponents.

6.EE.2. Write, read, and evaluate expressions in which letters stand for numbers.

**EE6.EE.1-2.** Identify equivalent number sentences.

4	Generate a two-step math sentence using appropriate numbers and symbols.
3	Identify equivalent number sentences.
2	Match number sentence with the correct picture representation.
1	Identify math symbol “=” as meaning equal to.

6.EE.3. Apply the properties of operations to generate equivalent expressions.

6.EE.4. Identify when two expressions are equivalent

**EE6.EE.3-4.** Demonstrate understanding of equivalent expressions.

4	Solve equivalent expressions to illustrate that they are equivalent
3	Demonstrate understanding of equivalent expressions.
2	Recognize different displays of the equal quantities.
1	Match different displays of the same quantity.

**EXPRESSIONS AND EQUATIONS - Reason about and solve one-variable equations and inequalities**

6.EE.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.

6.EE.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.

6.EE.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.

**EE6.EE.5-7.** Match an equation to a real-world problem in which variables are used to represent numbers.

4	EE6.EE.2. Using a variable, generate an equivalent equation that represents a real-world problem.
3	EE6.EE.2. Match an equation to a real-world problem in which variables are used to represent numbers.
2	EE6.EE.2. Determine what is unknown in an equation.
1	EE6.EE.2. Identify the letter in a mathematical sentence.

**GEOMETRY - Solve real-world and mathematical problems involving area, surface area, and volume**

6.G.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.

6.G.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.

**EE6.G.1-2. Demonstrate area.**

4	Find area.
3	Demonstrate area.
2	Determine what is the larger area.
1	Indicate the inside of a space.

6.G.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.

**EE6.G.4. Identify common three-dimensional shapes.**

4	Relate real-world items as three-dimensional shapes to their two-dimensional representations
3	Identify common three-dimensional shapes.
2	Sort three-dimensional shapes and two-dimensional shapes.
1	Match shapes.

**STATISTICS AND PROBABILITY - Develop understanding of statistical variability**

6.SP.1. Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers.

6.SP.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.

**EE6.SP.1-2. Display data on a graph or table that shows variability in the data.**

4	Collect, display, and describe data on a graph or table.
3	Display data on a graph or table that shows variability of data.
2	Organize data.
1	Sort information into categories of same and different

**STATISTICS AND PROBABILITY - Summarize and describe distributions**

6.SP.5. Summarize numerical data sets in relation to their context.

**EE6.SP.5. Summarize data distributions on a graph or table.**

4	Summarize the data on a graph or table
3	Summarize data distributions on a graph or table.
2	Use a graph to determine which category has the most.
1	Identify which has more or less.