

# Grade 6 Yearlong Mathematics Map

**Resources:** Approved from Board of Education

**Assessments:** District Benchmark Assessments

**Common Core State Standards – Standards for Mathematical Practice:**

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| 1. Make sense of problems and persevere in solving them.            | 2. Reason abstractly and quantitatively.                  |
| 3. Construct viable arguments and critique the reasoning of others. | 4. Model with mathematics.                                |
| 5. Use appropriate tools strategically.                             | 6. Attend to precision.                                   |
| 7. Look for and make use of structure.                              | 8. Look for and express regularity in repeated reasoning. |

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
RP	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. For example, “The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak.” “For every vote candidate A received, candidate C received nearly three votes.”	Ratio	6.RP.1 Describe ratio relationships using ratio language	Ratio
RP	Understand ratio concepts and use ratio reasoning to solve problems.	6.RP.2 Understand the concept of a unit rate $a/b$ associated with a ratio $a:b$ with $b \neq 0$ , and use rate language in the context of a ratio relationship. For example, “This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $3/4$ cup of flour for each cup of sugar.” “We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger.”	Ratio Unit Rate	6.RP.2 Describe a unit rate using rate language. Calculate a unit rate.	Ratio Rate Unit Rate
RP	Understand ratio concepts and use ratio reasoning to solve problems.	6.RP.3 Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.	Ratio Rates	6.RP.3 Solve real world and math problems using ratio and rate using tables, tape diagrams, double number line diagrams or equations.	Ratio Ratio Table Rate Unit Rate Equivalent Double Number Line Percent Tape Diagram

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RP	Understand ratio concepts and use ratio reasoning to solve problems.	6.RP.3a Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.	Ratio Table	6.RP.3a Make tables of equivalent ratios relating quantities with whole-number measurements, compare ratios, and find missing values in the tables	Equivalent Ratio Table
RP	Understand ratio concepts and use ratio reasoning to solve problems.	6.RP.3a Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.	Coordinate Graphing	6.RP.3a Plot pairs of values on a coordinate plane	Coordinate Plane Plot Axis Quadrant
RP	Understand ratio concepts and use ratio reasoning to solve problems.	6.RP.3b Solve unit rate problems including those involving unit pricing and constant speed. For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?	Unit Rates	6.RP.3b Solve unit rate problems including those involving unit pricing and constant speed	Unit Rate Unit Price Constant Speed
RP	Understand ratio concepts and use ratio reasoning to solve problems.	6.RP.3c Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.	Percent	6.RP.3c Find a percent of a quantity as a rate per 100	Percent Rate Ratio
RP	Understand ratio concepts and use ratio reasoning to solve problems.	6.RP.3c Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.	Percent	6.RP.3c Solve problems involving finding the whole, given a part and the percent	Percent Rate Ratio
RP	Understand ratio concepts and use ratio reasoning to solve problems.	6.RP.3d Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.	Measurement	6.RP.3d Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities	Ratio Measurement Units

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
NS	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, e.g., by using visual fraction models and equations to represent the problem. For example, create a story context for $(2/3) \div (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) \div (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$ . (In general, $(a/b) \div (c/d) = ad/bc$ .) How much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $3/4$ -cup servings are in $2/3$ of a cup of yogurt? How wide is a rectangular strip of land with length $3/4$ mi and area $1/2$ square mi?	Division of Fractions	6.NS.1 Divide fractions using fraction models and equations and solve word problems involving division of fractions	Quotient Divisor Dividend Reciprocal
NS	Compute fluently with multi-digit numbers and find common factors and multiples.	6.NS.2 Fluently divide multi-digit numbers using the standard algorithm.	Measurement	6.NS.2 Divide multi-digit numbers using the standard algorithm.	Quotient Divisor Dividend
NS	Compute fluently with multi-digit numbers and find common factors and multiples.	6.NS.3 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.	Addition, Subtraction, Multiplication, and Division of Decimals	6.NS.3 Compute addition, subtraction, multiplication, and division with multi-digit decimals using the standard algorithm for each operation.	Sum Difference Product Divisor Dividend Quotient Factors Place value Decimals

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
NS	Compute fluently with multi-digit numbers and find common factors and multiples.	6.NS.4 Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. For example, express $36 + 8$ as $4(9 + 2)$ .	GCF LCM Distributive Property	6.NS.4 Identify GCF of two whole numbers 1 - 100	GCF LCM Distributive Property
NS	Compute fluently with multi-digit numbers and find common factors and multiples.	6.NS.4 Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. For example, express $36 + 8$ as $4(9 + 2)$ .	GCF LCM Distributive Property	6.NS.4 Identify LCM of two whole numbers 1 - 12	
NS	Compute fluently with multi-digit numbers and find common factors and multiples.	6.NS.4 Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. For example, express $36 + 8$ as $4(9 + 2)$ .	Common factor GCF Common multiple LCM Distributive Property	6.NS.4 Apply the distributive property of addition of two whole numbers 1 - 100 using GCF	
NS	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.	Integers	6.NS.5 Represent and explain positive and negative numbers and zero in real-world contexts	Integers Positive Negative Opposite

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NS	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.6 Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.	Rational Numbers		Number line Axis Coordinate Plane
NS	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.6a Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., $-(-3) = 3$ , and that 0 is its own opposite.	Integers	6.NS.6a Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself	Opposite
NS	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.6b Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.	Coordinate Plane	6.NS.6b Determine the quadrant in the coordinate plane based on the signs of numbers in the ordered pairs; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes	Ordered Pairs Quadrants Reflections
NS	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.6c Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.	Integers Number Lines	6.NS.6c Find and position integers and other rational numbers on a horizontal or vertical number line diagram	Horizontal Vertical Integer Rational Numbers Coordinate Plane
NS	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.6c Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.	Integers Coordinate Plane	6.NS.6c Find and position pairs of integers and other rational numbers on a coordinate plane	Integers Coordinate Plane Rational Numbers

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NS	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.7 Understand ordering and absolute value of rational numbers.	Rational Numbers	6.NS.7	Order Absolute Value
NS	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.7a Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. For example, interpret $-3 > -7$ as a statement that $-3$ is located to the right of $-7$ on a number line oriented from left to right.	Inequalities	6.NS.7a Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram	Inequality Number Line
NS	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.7b Write, interpret, and explain statements of order for rational numbers in real-world contexts. For example, write $-3^{\circ}\text{C} > -7^{\circ}\text{C}$ to express the fact that $-3^{\circ}\text{C}$ is warmer than $-7^{\circ}\text{C}$ .	Ordering	6.NS.7b Write, interpret, and explain statements of order for rational numbers in real-world contexts	Rational Numbers Order
NS	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.7c Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. For example, for an account balance of $-30$ dollars, write $ -30  = 30$ to describe the size of the debt in dollars.	Absolute Value	6.NS.7c Recognize the absolute value of a rational number as its distance from 0 on the number line. Interpret absolute value as magnitude for a positive or negative quantity in a real-world situation	Absolute Value Rational Number Positive Negative
NS	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.7d Distinguish comparisons of absolute value from statements about order. For example, recognize that an account balance less than $-30$ dollars represents a debt greater than 30 dollars.	Absolute Value	6.NS.7d Distinguish comparisons of absolute value from statements about order	Absolute Value Positive Negative

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NS	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.8 Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.	Coordinate Plane Absolute Value	6.NS.8 Solve mathematical and real-world problems by graphing points in all four quadrants of the coordinate plane	Quadrants Coordinate Plane
NS	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.8 Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.	Coordinate Plane Absolute Value	6.NS.8 Find distances between points with the same first coordinate or the same second coordinate using coordinates and using absolute value	Distance
EE	Apply and extend previous understandings of arithmetic to algebraic expressions.	6.EE.1 Write and evaluate numerical expressions involving whole-number exponents.	Expressions Exponents	6.EE.1 Write and evaluate numerical expressions involving whole-number exponents	Numerical Expression Exponent Base Power
EE	Apply and extend previous understandings of arithmetic to algebraic expressions.	6.EE.2 Write, read, and evaluate expressions in which letters stand for numbers.	Expressions	6.EE.2	Expression Variable
EE	Apply and extend previous understandings of arithmetic to algebraic expressions.	6.EE.2a Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation "Subtract $y$ from 5" as $5 - y$ .	Expressions	6.EE.2a Write expressions with operations, numbers and variables	Expression Variable

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EE	Apply and extend previous understandings of arithmetic to algebraic expressions.	6.EE.2b Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. For example, describe the expression $2(8 + 7)$ as a product of two factors; view $(8 + 7)$ as both a single entity and a sum of two terms.	Expressions	6.EE.2b Identify parts of an expression using mathematical terms	Sum Term Product Factor Quotient Coefficient
EE	Apply and extend previous understandings of arithmetic to algebraic expressions.	6.EE.2b Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. For example, describe the expression $2(8 + 7)$ as a product of two factors; view $(8 + 7)$ as both a single entity and a sum of two terms.	Expressions	6.EE.2b Identify one or more parts of an expression as a single entity	
EE	Apply and extend previous understandings of arithmetic to algebraic expressions.	6.EE.2c Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$ .	Expressions	6.EE.2c Evaluate expressions given specific values for the variables	
EE	Apply and extend previous understandings of arithmetic to algebraic expressions.	6.EE.2c Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$ .	Expressions	6.EE.2c Evaluate expressions that arise from formulas used in real-world problems	



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EE	Apply and extend previous understandings of arithmetic to algebraic expressions.	6.EE.2c Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$ .	Expressions Order of Operations	6.EE.2c Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order	Order of Operations
EE	Apply and extend previous understandings of arithmetic to algebraic expressions.	6.EE.3 Apply the properties of operations to generate equivalent expressions. For example, apply the distributive property to the expression $3(2 + x)$ to produce the equivalent expression $6 + 3x$ ; apply the distributive property to the expression $24x + 18y$ to produce the equivalent expression $6(4x + 3y)$ ; apply properties of operations to $y + y + y$ to produce the equivalent expression $3y$ .	Distributive Property Simplifying Expressions	6.EE.3 Apply the properties of operations to generate equivalent expressions	Order of Operations Distributive Property
EE	Apply and extend previous understandings of arithmetic to algebraic expressions.	6.EE.4 Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). For example, the expressions $y + y + y$ and $3y$ are equivalent because they name the same number regardless of which number $y$ stands for.	Equivalent Expressions	6.EE.4 Identify when two expressions are equivalent	
EE	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? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.	Equations Inequalities	6.EE.5 Recognize that solving an equation or inequality is a process of answering a question: which values from a specified set, if any, make the equation or inequality true?	

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EE	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? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.	Equations Inequalities Substitution	6.EE.5 Determine whether a given number in a specified set makes an equation or inequality true with substitution	
EE	Reason about and solve one-variable equations and inequalities.	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 number, or, depending on the purpose at hand, any number in a specified set.	Expressions	6.EE.6 Write variable expressions when solving a mathematical problem or real-world problem, recognizing that a variable can represent an unknown number or any number in a specified set	
EE	Reason about and solve one-variable equations and inequalities.	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.	Equations	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.	
EE	Reason about and solve one-variable equations and inequalities.	6.EE.8 Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.	Inequalities	6.EE.8 Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a mathematical problem or a real-world problem	
EE	Reason about and solve one-variable equations and inequalities.	6.EE.8 Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.	Inequalities	6.EE.8 Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions	Infinite

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EE	Reason about and solve one-variable equations and inequalities.	6.EE.8 Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.	Inequalities Number Lines	6.EE.8 Represent solutions of inequalities on number line diagrams	
EE	Represent and analyze quantitative relationships between dependent and independent variables.	6.EE.9 Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.	Equations	6.EE.9 Write an equation with variables to represent two quantities in a real-world problem that change in relation to one another	Independent Variable Dependent Variable
EE	Represent and analyze quantitative relationships between dependent and independent variables.	6.EE.9 Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.	Equations Graphing	6.EE.9 Analyze the relationship between dependent and independent variables using graphs and tables, and relate these to an equation	Independent Variable Dependent Variable

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G	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.	Area	6.G.1 Find the area of triangles	Triangle Right Triangle Area
G	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.	Area	6.G.1 Find the area of quadrilaterals	Quadrilateral Area
G	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.	Area	6.G.1 Find the area of polygons by composing into rectangles or decomposing into triangles and other shapes	Polygon Area Rectangle
G	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.	Area	6.G.1 Find the area of triangles, quadrilaterals, and polygons in real-world problems	Triangle Quadrilateral Polygon Area
G	Solve real-world and mathematical problems involving area, surface area, and volume.	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 $V = lwh$ and $V = bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.	Volume	6.G.2 Find the volume of a right rectangular prism with fractional edge lengths	Volume Right rectangular prism Fractional edge length Cube Unit Fraction

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G	Solve real-world and mathematical problems involving area, surface area, and volume.	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 $V = lwh$ and $V = bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.	Volume	6.G.2 Apply the formulas $V = lwh$ and $V = bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving mathematical problems and real-world problems	Volume Right Rectangular Prism Fractional edge length
G	Solve real-world and mathematical problems involving area, surface area, and volume.	6.G.3 Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.	Polygons Coordinate Graphing	6.G.3 Draw polygons in the coordinate plane given coordinates for the vertices	Polygon Coordinate Plane Vertices
G	Solve real-world and mathematical problems involving area, surface area, and volume.	6.G.3 Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.	Polygons Coordinate Graphing	6.G.3 Find the length of a side joining points with the same first coordinate or the same second coordinate including in a real-world situation	Coordinate
G	Solve real-world and mathematical problems involving area, surface area, and volume.	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. Apply these techniques in the context of solving real-world and mathematical problems.	Nets Surface Area	6.G.4 Represent three-dimensional figures using nets made up of rectangles and triangles	Three-dimensional Net
G	Solve real-world and mathematical problems involving area, surface area, and volume.	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. Apply these techniques in the context of solving real-world and mathematical problems.	Nets Surface Area	6.G.4 Find the surface area of three-dimensional figures using nets including real-world problems	Three-dimensional Net Surface Area

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SP	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. For example, “How old am I?” is not a statistical question, but “How old are the students in my school?” is a statistical question because one anticipates variability in students’ ages.	Statistics	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	Three-dimensional Net Surface Area
SP	Develop understanding of statistical variability.	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.	Statistics	6.SP.2 Recognize 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	
SP	Develop understanding of statistical variability.	6.SP.3 Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.	Statistics	6.SP.3 Recognize that a measure of center for a numerical data set summarizes all of its values with a single number	Measure of Variation
SP	Develop understanding of statistical variability.	6.SP.3 Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.	Statistics	6.SP.3 Recognize that a measure of variation describes how its values vary with a single number	
SP	Summarize and describe distributions.	6.SP.4 Display numerical data in plots on a number line, including dot plots, histograms, and box plots.	Statistics Graphing	6.SP.4 Display numerical data in plots on a number line, including dot plots, histograms, and box plots	Number line Dot plot Histogram Box plot
SP	Summarize and describe distributions.	6.SP.5 Summarize numerical data sets in relation to their context, such as by:	Statistics		Data sets
SP	Summarize and describe distributions.	6.SP.5a Reporting the number of observations.	Statistics	6.SP.5a Summarize numerical data sets by reporting the number of observations	

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SP	Summarize and describe distributions.	6.SP.5b Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.	Statistics	6.SP.5b Summarize numerical data sets by describing the nature of the attribute under investigation, including how it was measured and its units of measurement	
SP	Summarize and describe distributions.	6.SP.5c Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.	Statistics	6.SP.5c Summarize numerical data sets by giving quantitative measures of center, such as median and/or mean	Median Mean
SP	Summarize and describe distributions.	6.SP.5c Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.	Statistics	6.SP.5c Summarize numerical data sets by giving variability, such as interquartile range and/or mean absolute deviation	Variability Interquartile range Mean absolute deviation
SP	Summarize and describe distributions.	6.SP.5c Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.	Statistics	6.SP.5c Summarize numerical data sets by describing any overall pattern and any outliers from the overall pattern	Striking deviation Outliers
SP	Summarize and describe distributions.	6.SP.5d Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.	Statistics	6.SP.5d Summarize numerical data sets by relating the choice of measures of center and variability to the shape of the data distribution	Measures of Center Variability Data