	Quarter 1					
Unit	Standard Item Range	Depth of Knowledge	Standards	I Can	Item Specs	Math Framework
Ch.1 Ratios and Rates	Medium	2	6.C.3 Solve real-world problems with positive fractions and decimals by using one or two operations.	*I can solve real-world problems that involve positive fractions using up to two operations. *I can solve real-world problems with positive decimals using up to two operations.	6.C.3	6.C.3
Ch.2 Fractions, Decimals, and Percents	Medium	3	6.NS.5 Know commonly used fractions (halves, thirds, fourths, fifths, eighths, tenths) and their decimal and percent equivalents. Convert between any two representations (fractions, decimals, percents) of positive rational numbers without the use of a calculator.	*I can give examples of commonly used fractions. *I can translate between commonly used fractions and their decimal and percent equivalents. *Without using a calculator, I can convert between fractions, decimals and percents of positive rational numbers.	6.NS.5	6.NS.5
	Low	2	6.NS.6 Identify and explain prime and composite numbers.	*I can identify prime numbers. *I can identify composite numbers. *I can explain how to determine if numbers are prime or composite.	6.NS.6	6.NS.6
	Low	1	6.NS.7 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 from 1 to 100, with a common factor as a multiple of a sum of two whole numbers with no common factor.	*I can find the greatest common factor (GCF) between two numbers less than or equal to 100. *I can find the least common multiple (LCM) between two whole numbers less than or equal to 12. *I can determine whether two whole numbers from 1 to 100 have a common factor. *I can use the distributive property to express a sum of two whole numbers between 1 and 100 with a common factor as a multiple of a sum of two whole numbers without a common factor.	6.NS.7	6.NS.7
	Medium	2	6.NS.8 Interpret, model, and use ratios to show the relative sizes of two quantities. Describe how a ratio shows the relationship between two quantities. Use the following notations: a/b, a to b, a:b.	*I can interpret ratios as relative size between two quantities. *I can model and use ratios to show relative sizes of two quantities. *I can describe how a ratio show the relationship between two quantities. *I can represent ratios using the following notations: a/b, a to b, and a:b.	6.NS.8	6.NS.8
	Low	2	6.NS.9 Understand the concept of a unit rate and use terms related to rate in the context of a ratio relationship.	*I can demonstrate understanding of unit rates. *I can use terms related to rate in the context of a ratio relationship.	6.NS.9	6.NS.9
	Medium	3	6.NS.10 Use reasoning involving rates and ratios to model real-world and other mathematical problems (e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations).	*I can use reasoning to model real-world problems involving rates. *I can use reasoning to model real-world problems involving ratios. *I can represent real world and other mathematical problems with rates and ratios.	6.NS.10	6.NS.10
	Medium	3	6.AF.9 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	*I can create tables of equivalent ratios with whole-number measurements. *I can find missing values in tables showing equivalent ratios with whole-number measurements. *I can interpret the values in a table as coordinates to be plotted on the coordinate plane. *I can plot the pairs of values from a table.	6.AF.9	6.AF.9
	Quarter 2					
Unit	Standard Item Range	Depth of Knowledge	Standards	I Can	Item Specs	
Ch.3 Compute with multi-digit numbers	High	1	6.C.1 Divide multi-digit whole numbers fluently using a standard algorithmic approach.	*I can use a standard algorithm to fluently divide multi-digit whole numbers.	6.C.1	6.C.1
Ch.4 Multiply and Divide Fractions	High	1	6.C.2 Compute with positive fractions and positive decimals fluently using a standard algorithmic approach.	*I can compute with positive fractions fluently using a standard algorithm. *I can compute with positive decimals fluently using a standard algorithm.	6.C.2	6.C.2
Ch.5 Integers and the coordinate plane	Medium	2	6.C.3 Solve real-world problems with positive fractions and decimals by using one or two operations.	*I can solve real-world problems that involve positive fractions using up to two operations. *I can solve real-world problems with positive decimals using up to two operations.	6.C.3	6.C.3
	Medium	3	6.NS.10 Use reasoning involving rates and ratios to model real-world and other mathematical problems (e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations).	*I can use reasoning to model real-world problems involving rates. *I can use reasoning to model real-world problems involving ratios. *I can represent real world and other mathematical problems with rates and ratios.	6.NS.10	6.NS.10
	Medium	2	6.C.4 Compute quotients of positive fractions and solve real-world problems involving division of fractions by fractions. Use a visual fraction model and/or equation to represent these calculations.	*I can divide two positive fractions. *I can solve real-world problems involving division of fractions by fractions. *I can use fraction models to represent dividing positive fractions by fractions. *I can use equations to divide positive fractions by fractions.	6.C.4	6.C.4
	Low	2	6.GM.1 Convert between measurement systems (English to metric and metric to English) given conversion factors, and use these conversions in solving real-world problems.	*I can use conversion factors to convert between English and metric measurement systems. *Given conversion factors, I can convert between measurement systems to solve real-world problems.	6.GM.1	6.GM.1
	High	2	6.NS.1 Understand that positive and negative numbers are used to describe quantities having opposite directions or values (e.g., temperature above/Δ zero, elevation above/Δ sea level, credits/debits, positive/negative electric charge). Use positive and negative numbers to represent and compare quantities in real-world contexts, explaining the meaning of 0 in each situation.	*I can show on a number line that a negative number lies in the opposite direction as a positive number. *I can show that positive and negative numbers have opposite values. *I can use positive and negative numbers to represent and compare quantities in a variety of real-world contexts. *I can explain the meaning of 0 in real world contexts.	NS.1	6.NS.1

	Medium	3	6.NS.2 Understand the integer number system. 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.	*I can demonstrate understanding of integers. *I can show that numbers with opposite signs are located on opposite sides of zero on the number line. *I can explain that the opposite of the opposite of a number is actually the number itself. *I can explain that 0 is its own opposite.	NS.2	6.NS.2
	Medium	3	6.NS.3 Compare and order rational numbers and plot them on a number line. Write, interpret, and explain statements of order for rational numbers in real-world contexts.	*I can plot rational numbers on a number line. *I can compare and order rational numbers. *I can write statements of order for rational numbers in real-world problems. *I can interpret and explain statements of order for rational numbers in real-world problems.	6.NS.3	6.NS.3
	Medium	3	6.NS.4 Understand that the absolute value of a number is the distance from zero on a number line. Find the absolute value of real numbers and know that the distance between two numbers on the number line is the absolute value of their difference. Interpret absolute value as magnitude for a positive or negative quantity in a real-world situation.	*I can use a number line to explain that absolute value is the distance a number is away from zero. *I can find the absolute value of real numbers. *I can show the distance between two numbers on the number line is the absolute value of their difference. *I can relate absolute value to magnitude for a positive or negative quantity in a real-world situation.	6.NS.4	6.NS.4
	Medium	3	6.AF.7 Understand that signs of numbers in ordered pairs indicate the quadrant containing the point; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes. Graph points with rational number coordinates on a coordinate plane.	*I can accurately identify the four quadrants of a coordinate plane. *I can demonstrate understanding that the signs of the numbers in ordered pairs indicate which quadrant a point lies. *I can identify rules or patterns in the signs as they relate to quadrants. *I can graph points with rational number coordinates on a coordinate plane.	6.AF.7	6.AF.7
	Medium	3	6.AF.8 Solve real-world and other mathematical problems by graphing points with rational number coordinates on a coordinate plane. Include the use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.	*I can solve real-world and other problems by graphing points with rational number coordinates on a coordinate plane. *I can find the distance between points with the same first coordinate or the same second coordinate.	6.AF.8	6.AF.8
	Quarter 3					
Unit	Standard Item Range	Depth of Knowledge	Standards	I Can	Item Specs	
Ch.6 Expressions	Low	1	6.NS.7 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 from 1 to 100, with a common factor as a multiple of a sum of two whole numbers with no common factor.	*I can find the greatest common factor (GCF) between two numbers less than or equal to 100. *I can find the least common multiple (LCM) between two whole numbers less than or equal to 12. *I can determine whether two whole numbers from 1 to 100 have a common factor. *I can use the distributive property to express a sum of two whole numbers between 1 and 100 with a common factor as a multiple of a sum of two whole numbers without a common factor.	6.NS.7	6.NS.7
Ch.7 Equations	Medium	3	6.NS.10 Use reasoning involving rates and ratios to model real-world and other mathematical problems (e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations).	*I can use reasoning to model real-world problems involving rates. *I can use reasoning to model real-world problems involving ratios. *I can represent real world and other mathematical problems with rates and ratios.	6.NS.10	6.NS.10
Ch.8 Functions and Inequalities	High	1	6.C.2 Compute with positive fractions and positive decimals fluently using a standard algorithmic approach.	*I can compute with positive fractions fluently using a standard algorithm. *I can compute with positive decimals fluently using a standard algorithm.	6.C.2	6.C.2
	Low	2	6.C.5 Evaluate positive rational numbers with whole number exponents.	*I can evaluate positive rational numbers with whole number exponents.	6.C.5	6.C.5
	Medium	2	6.C.6 Apply the order of operations and properties of operations (identity, inverse, commutative properties of addition and multiplication, associative properties of addition and multiplication, and distributive property) to evaluate numerical expressions with nonnegative rational numbers, including those using grouping symbols, such as parentheses, and involving whole number exponents. Justify each step in the process.	*I can apply the order of operations to evaluate numerical expressions with nonnegative rational numbers. *I can use the identity and inverse properties of addition and multiplication when evaluating numerical expressions with nonnegative rational numbers. *I can use the commutative properties of addition and multiplication when evaluating expressions with nonnegative rational numbers. *I can evaluate expressions that have grouping symbols and whole number exponents.	6.C.6	6.C.6
	High	3	6.AF.1 Evaluate expressions for specific values of their variables, including expressions with whole-number exponents and those that arise from formulas used in real-world problems.	*I can evaluate variable expressions by substituting specific values in for the variables. *I can evaluate variable expressions with whole number exponents by substituting specific values in for the variables. *I can evaluate variable expressions that arise from formulas used in geometry and real-world problems by substituting specific values in for the variables.	6.AF.1	6.AF.1

	Medium	2	6.AF.2 Apply the properties of operations (e.g., identity, inverse, commutative, associative, distributive properties) to create equivalent linear expressions and to justify whether two linear expressions are equivalent when the two expressions name the same number regardless of which value is substituted into them.	*I can use the properties of operations to create equivalent linear expressions. *I can use the identity and inverse properties of addition and multiplication to create equivalent linear expressions. *I can use the identity and inverse properties of addition and multiplication to justify whether two linear expressions are equivalent when the same number is generated regardless of which value of substituted in to it. *I can use the commutative properties of addition and multiplication to create equivalent linear expressions. *I can use the commutative properties of addition and multiplication to justify whether two linear expressions are equivalent when the same number is generated regardless of which value of substituted in to it. *I can evaluate expressions that have grouping symbols and whole number exponents. *I can use the distributive property to create equivalent linear expressions. *I can use the distributive property to justify whether two linear expressions are equivalent when the same number is generated regardless of which value of substituted in to it. *I can determine whether two expressions are equivalent.	6.AF.2	6.AF.2
	High	2	6.AF.3 Define and use multiple variables when writing expressions to represent real-world and other mathematical problems, and evaluate them for given values.	*I can write expressions using multiple variables to represent real-world problems. *I can define variables within expressions given in the context of a problem. *I can evaluate expressions that include multiple variables in real-world problems for given values.	6.AF.3	6.AF.3
	Medium	2	6.AF.4 Understand that solving an equation or inequality is the process of answering the following 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.	*I can use substitution to determine whether a number in a set makes an equation or an inequality true. *I can explain what the solution to an equation or inequality represents.	6.AF.4	6.AF.4
	Medium	2	6.AF.5 Solve equations of the form x + p = q, x - p = q, px = q, and x/p = q fluently for cases in which p, q and x are all nonnegative rational numbers. Represent real world problems using equations of these forms and solve such problems.	*I can identify the operation and its inverse operation in order to solve one step linear equations. *I can solve linear equations using one of four operations when working with nonnegative rational numbers. *I can represent real-world problems using one step linear equations. *I can solve real-world problems involving one step linear equations.	6.AF.5	6.AF.5
	Medium	2	6.AF.6 Write an inequality of the form x > c, x = c, x < c, or x = c, where c is a rational number, to represent a constraint or condition in a real-world or other mathematical problem. Recognize inequalities have infinitely many solutions and represent solutions on a number line diagram.	*I can write inequalities of the form x > c, x ≥ c, x < c, or x ≤ c to represent real-world problems. *I can write inequalities of the form x > c, x ≥ c, x < c, or x ≤ c to represent a given visual representation. *I can demonstrate understanding that inequalities have infinite solutions. *I can graph solutions to inequalities on a number line.	6.AF.6	6.AF.6
	Medium	3	6.AF.10 Use variables to represent two quantities in a proportional relationship in a real-world problem; write an equation to express one quantity, the dependent variable, in terms of the other quantity, the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation.	*I can use variables to represent quantities in proportional relationships in real-world problems. *I can write an equation expressing the dependent variable in terms of the independent variable. *I can use graphs to analyze the relationship between dependent and independent variables. *I can use tables to analyze the relationship between dependent and independent variables. *I can demonstrate how graphs and tables depicting the relationship between dependent and independent variables relate to equations.	6.AF.10	6.AF.10
	Quarter 4					
Unit	Standard Item Range	Depth of Knowledge	Standards	I Can	Item Specs	
Ch.9 Area	Medium	3	6.AF.8 Solve real-world and other mathematical problems by graphing points with rational number coordinates on a coordinate plane. Include the use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.	*I can solve real-world and other problems by graphing points with rational number coordinates on a coordinate plane. *I can find the distance between points with the same first coordinate or the same second coordinate.	6.AF.8	6.AF.8
Ch.10 Volume and Surface Area	Medium	2	6.GM.2 Know that the sum of the interior angles of any triangle is 180º and that the sum of the interior angles of any quadrilateral is 360º. Use this information to solve real-world and mathematical problems.	*I can show that the sum of the interior angles of all triangles is 180°. *I can show that the sum of all interior angles of any quadrilateral is 360°. *I can solve real-world problems involving missing angles of triangles and quadrilaterals. *I can solve problems involving missing angles of triangles and quadrilaterals.	6.GM.2	6.GM.2
Ch.11 Statistical Measures	Medium	3	6.GM.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 to solve real-world and other mathematical problems.	*Given coordinates for their vertices, I can draw polygons in the coordinate plane. *I can use coordinates with the same first or second coordinate to find side lengths of polygons. *I can solve real-world problems involving missing length by using the coordinates of polygons.	6.GM.3	6.GM.3
Ch.12 Statistical Displays	Medium	3	6.GM.4 Find the area of complex shapes composed of polygons by composing or decomposing into simple shapes; apply this technique to solve real-world and other mathematical problems.	*I can decompose or compose complex shapes composed of polygons. *I can find the area of shapes composed of polygons. *I can solve real-world problems where finding the area of complex shapes is required.	6.GM.4	6.GM.4

	Medium	3	6.GM.5 Find the volume of a right rectangular prism with fractional edge lengths using unit cubes of the appropriate unit fraction edge lengths (e.g., using technology or concrete materials), 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 to solve real-world and other mathematical problems.	*I can use unit cubes (using technology or concrete materials) to find the volume of right rectangular prisms with fractional edge lengths. *I can use unit cubes (using technology or concrete materials) to show the volume of a right rectangular prism with fractional edge lengths. *I can show that finding the volume of a right rectangular prism using unit cubes is the same as finding the volume by multiplying the edge lengths of the prism. *I can apply the volume formulas V=lwh and V=Bh to find the volume of right rectangular prisms with fractional edge lengths. *I can solve real-world problems by finding the area of right rectangular prisms with fractional edge lengths.	6.GM.5	6.GM.5
	Medium	3	6.GM.6 Construct right rectangular prisms from nets and use the nets to compute the surface area of prisms; apply this technique to solve real-world and other mathematical problems.	*I can construct right rectangular prisms from nets. *I can use the net of a right rectangular prism to find the surface area. *I can solve real-world problems asking me to find the surface area of right rectangular prisms by using nets.	6.GM.6	6.GM.6
	Medium	2	6.DS.1 Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for the variability in the answers. 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.	I Can StatementsAcademic Vocabulary *I can recognize that statistical questions anticipate variability in data related to the question. *I can explain how statistical questions will account for the variability in responses. *I can understand that data collected to answer statistical questions has a distribution and can describe it by its overall shape. *I can describe a data distribution by its center and spread.	6.DS.1	6.DS.1
	Medium	2	6.DS.2 Select, create, and interpret graphical representations of numerical data, including line plots, histograms, and box plots.	*I can identify appropriate graphical representations of numerical data including line plots, histograms, and box plots. *I can create and interpret line plots that represent numerical data. *I can create and interpret histograms that represent numerical data. *I can create and interpret box plots that represent numerical data.	6.DS.2	6.DS.2
	Medium	3	6.DS.3 Formulate statistical questions; collect and organize the data (e.g., using technology); display and interpret the data with graphical representations (e.g., using technology).	*I can create statistical questions. *I can collect the data from a statistical question. *I can organize (using technology) data based on statistical questions. *I can display and interpret data collected from a statistical question with graphical representations (using technology).	6.DS.3	6.DS.3
	Medium	3	6.DS.4 Summarize numerical data sets in relation to their context in multiple ways, such as: report the number of observations; describe the nature of the attribute under investigation, including how it was measured and its units of measurement; determine quantitative measures of center (mean and/or median) and spread (range and interquartile range), as well as describe any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered; and relate the choice of measures of center and spread to the shape of the data distribution and the context in which the data were gathered.	*I can report the number of observations when summarizing numerical data sets. *I can describe the nature of the attribute under investigation, including how it was measured and the units of measurement, when summarizing data sets. *I can describe overall patterns and deviations from overall patterns with reference to the context in which data was gathered. *I can find the mean, median of data sets. *I can find the range and interquartile range of data sets. *I can communicate my choice of measure of center and spread to the shape of the data distribution and the context in which the data were gathered.	6.DS.4	6.DS.4