Unit	Lesson	Lesson Objectives
Understanding Ratios and Rates		
	Describing Part-to-Part Relationships	
		Analyze how a change in a quantity affects a part-to-part relationship.
		Describe ratio relationships between two quantities using informal language.
		Use models to represent relationships between quantities.
	Using Ratio Notation	
		Use the notation of ratio language to describe relationships between two quantities.
	Equivalent Ratios	
		Analyze patterns in a table of equivalent ratios.
		Find missing values in a table using ratio reasoning.
	Equivalent Ratios in Measurement	
		Analyze patterns of equivalent ratios in measurement.
		Identify equivalent ratios in measurements.
	Understanding Unit Rates	
		Find unit rates.
	Comparing Ratios	
		Compare ratios using different strategies.
Applying Ratios and Rates		
	Measurements in the Customary System	
		Convert units of measurement in the customary system.
		Solve real-world problems by converting customary measurement units.
	Measurements in the Metric System	
		Convert units of measurement in the metric system.
		Solve real-world problems by converting metric measurement units.
	Converting Measurements between Systems	
		Convert measurement units between the customary and metric systems.
	Understanding Speed	
		Convert measures of speed within a system.
		Find speed given distance and time.
	Solving Speed Problems	
		Compare speeds.
		Find distance given time and speed.
		Find time given distance and speed.
	Unit Pricing	
		Find unit prices.
		Solve unit rate problems involving unit pricing.
	Performance Task: Making Energy Drinks	

Unit	Lesson	Lesson Objectives
Multi-Digit Computation		
	Adding and Subtracting Decimals	
		Add decimals.
		Subtract decimals.
		Use estimation to determine reasonableness.
	Prime Numbers and Prime Factorization	
		Identify a number as prime or composite.
		List the factors of a number.
		Represent a number as the product of its prime factors, using exponents to show repeated factors.
	Factors and Multiples	
		Apply greatest common factors and least common multiples to solve real-world problems.
		Determine the greatest common factor of two numbers.
		Determine the least common multiple of two numbers.
	The Distributive Property	
		Use the distributive property to generate equivalent expressions.
	Estimating and Finding Decimal Products	
		Find decimal products and use estimation to place the decimal point in a product.
	Using a Rule to Find Decimal Products	
		Multiply decimals and use a rule to place the decimal point in a product.
		Use estimation to determine reasonableness.
	Dividing Whole Numbers	
		Divide whole numbers.
		Write remainders as terminating or repeating decimals.
	Dividing Decimals	
		Divide decimals by decimals.
		Divide whole numbers by decimals.
		Use estimation to determine reasonableness.
Dividing Fractions		
	Dividing a Fraction by a Whole Number	
		Divide a fraction by a whole number equal to the fraction's denominator in real-world situations.
		Divide a fraction by a whole number using an equivalent fraction in real-world situations.
	Using Visual Models in Fraction Division	
		Use models to divide a whole number by a fraction.
		Use models to divide a whole number by a whole number.
	Dividing a Fraction by a Fraction	
		Use models to divide a fraction by a fraction.
	Finding a Rule for Dividing Fractions	
		Use the standard algorithm to divide fractions.
	Fraction Multiplication and Division	
		Solve real-world problems using fraction multiplication or division.

Unit	Lesson	Lesson Objectives
Percent		
	Understanding Percent	
		Compare ratios and percents of sets with different base units.
		Represent a portion of a set with a ratio.
		Translate ratios of part: whole and part/whole as percents.
		Use models to illustrate the meaning of percents.
	Fraction-Decimal-Percent Equivalents	
		Find equivalent forms of fractions, decimals, and percents.
	Finding Friendly Percentages	
		Find 10%, 25%, or 50% of a number by dividing by 10, 4, or 2.
		Find percentages by adding familiar parts.
		Solve single-step real-world problems using friendly percentages.
	Using Multiplication to Find Percents	
		Find any percent of a number by multiplying by the equivalent decimal.
		Use estimation to determine whether the answers are reasonable.
		Use unit-fraction equivalents to generate additional equivalents.
	Using Equivalent Ratios to Find Percents	
		Represent percent problems using equivalent ratios.
		Use patterns in equivalent ratios to find the percent of a whole.
	Using Equivalent Ratios to Find a Whole	
		Represent percent problems using equivalent ratios.
		Use patterns in equivalent ratios to find the whole, given the percent.
Extending the Number System		
	Negative Numbers in Real-World Contexts	
		Describe the meaning of zero in real-world contexts.
		Use positive and negative numbers to represent quantities in real-world contexts.
	Integers on the Number Line	
		Find the opposite of an integer.
		Graph integers on number lines.
		Identify integers.
	Plotting Positive and Negative Fractions	
		Graph negative fractions on a number line.
		Use a number line to compare and order positive and negative fractions.
	Comparing Rational Numbers	
		Define rational numbers and classify numbers.
		Graph rational numbers on a number line.
		Use a number line to compare rational numbers in a real-world context.
	Ordering Rational Numbers	
		Order rational numbers using a number line.
		Write and interpret statements of comparison for rational numbers in real-world contexts.

Unit	Lesson	Lesson Objectives
	Absolute Value	
		Compare and order magnitudes using absolute value.
		Define absolute value.
		Find the absolute value of an integer.
		Represent and compare real-world quantities using absolute value.
Relationships on the Coordinate Plane		
	The Coordinate Plane	
		Graph and name points in Quadrant I.
		Identify the parts of the coordinate plane.
	Plotting Points in the Four Quadrants	
		Describe the relationship between ordered pairs that differ only in sign.
		Graph and name points in all four quadrants.
		Identify the quadrant in which a point lies.
	Fractional Coordinates	
		Graph and name points that contain a decimal.
		Graph and name points that contain a fraction.
	Distance between Two Points	
		Use a number line to find the distance between two points in the same quadrant that have the same *x* - or y-coordinate.
		Use absolute value to find the distance between two points in different quadrants that have the same *x* - or y-coordinate.
	Polygons in the Coordinate Plane	
		Find lengths of sides for polygons drawn on the coordinate plane.
		Identify polygons on the coordinate plane given coordinates of the vertices.
	Plotting Equivalent Ratios	
		Identify patterns of plots of equivalent ratios.
		Plot tables of equivalent ratios on the coordinate plane.
Data Distributions and Analysis		
	Plotting Data on a Dot Plot	
		Display data on a dot plot.
		Distinguish between statistical and nonstatistical questions.
	Describing Data on Dot Plots	
		Describe a data set as shown on a dot plot, using the center, spread, and overall shape.
	Representing Data Sets with Histograms	
		Describe a data set as shown on a histogram, using the center, spread, and overall shape.
		Display data on a histogram.
	Finding the Mean	
		Calculate the mean of a set of data.
		Explain how the mean of a set of data is a balance point.
		Find a missing value in a set of data given the mean.

Unit	Lesson	Lesson Objectives
	Comparing Mean and Median	
		Choose the most appropriate measure of center to describe a set of data.
		Describe the impact of outliers on the mean and median.
		Find the median of a set of data.
	Range and Interquartile Range	
		Define and find the interquartile range of a set of data.
		Define and find the range of a set of data.
		Describe the impact of outliers on the range and interquartile range.
	Box Plots	
		Create a box plot to represent a set of data, given the summary statistics.
		Interpret a box plot.
	Mean Absolute Deviation	
		Calculate the mean absolute deviation for a set of data.
		Describe the impact of outliers on the mean absolute deviation.
		Interpret the mean absolute deviation of a set of data.
	Data Displays and Statistics	
		Compare two data sets using measures of center and spread.
		Describe the impact of the number of observations on the shape of the data.
		Interpret the shape of a data set in the context of the way in which data was collected.
	Performance Task: Exciting Entertainment	
Variables and Expressions		
	Numerical Expressions with Exponents	
		Evaluate numerical expressions including expressions containing whole number exponents.
		Write numerical expressions including expressions containing whole number exponents.
	Expressions with Unknowns	
		Read and write algebraic expressions.
		Use algebraic expressions to model real-world situations involving addition.
		Use algebraic expressions to model real-world situations involving subtraction.
	Expressions to Represent Multiplication and Division Problems	
		Use algebraic expressions to model real-world situations involving division.
		Use algebraic expressions to model real-world situations involving multiplication.
	Writing and Evaluating Expressions	
		Evaluate algebraic expressions containing one operation.
		Write algebraic expressions containing one operation.
	Expressions with More Than One Operation	
		Use the order of operations to evaluate algebraic expressions containing more than one operation.
		Write algebraic expressions containing more than one operation.
	Expressions with and without Parentheses	
		Use the order of operations to evaluate algebraic expressions containing more than one operation, with and without parentheses.
		Write algebraic expressions containing more than one operation, with and without parentheses.

Unit	Lesson	Lesson Objectives
	Working with Formulas	
		Evaluate scientific and mathematical formulas for given values.
	Equivalent Expressions	
		Generate equivalent expressions using the commutative and associative properties.
		Use substitution to determine if two expressions are equivalent.
	Equivalent Expressions and the Distributive Property	
		Generate equivalent expressions using the distributive property.
		Use substitution to determine if two expressions are equivalent.
Equations and Inequalities		
	Writing Equations to Find Unknowns	
		Differentiate between expressions and equations.
		Translate simple word problems into one-step equations.
		Use substitution to determine whether a given number is a solution of a one-step equation.
	Solving One-Step Equations: Addition and Subtraction	
		Write and solve one-step addition equations.
		Write and solve one-step subtraction equations.
	Solving One-Step Equations: Multiplication and Division	
		Write and solve one-step division equations.
		Write and solve one-step multiplication equations.
	Modeling Real-World Problems with One-Step Equations	
		Write and solve one-step variable equations modeling real-world contexts involving addition, subtraction, multiplication, and division of nonnegative rational numbers.
	Modeling Relationships between Real-World Quantities with Equations in Two Variables	
		Analyze a table to determine its correspondence to a real-world situation.
		Use a table to determine the proportional relationship between two real-world quantities.
	Relating Relationships Shown in Tables to Equations	
		Analyze the relationship between dependent and independent variables.
		Write an equation to represent two quantities in a real-world situation.
	Comparing Representations of Modeled Relationships	
		Compare multiple representations of the relationship between two real-world quantities.
		Create a graph to show a proportional relationship between two real-world quantities (using a table of values).
	Writing Inequalities	
		Describe the set of numbers that make the inequality true.
		Write an inequality to represent a constraint or condition in a real-world or mathematical problem.
		Write real-world scenarios given one-step inequalities.
	Graphing Inequalities on a Number Line	
		Graph solutions of one-step inequalities on number line diagrams.
		Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions.

Unit	Lesson	Lesson Objectives
Area		
	Finding Area on a Coordinate Plane	
		Calculate the area of a rectangle drawn in the coordinate plane.
		Find lengths of sides for rectangles drawn in the coordinate plane.
	Area of Parallelograms	
		Solve real-world problems involving the area of parallelograms.
		Use the formula $A = bh$ to find the area of a parallelogram.
	Area of Triangles	
		Calculate the area of triangles using the formula $A = \frac{1}{2}bh$.
		Solve real-world problems involving the area of triangles.
	Area of Special Quadrilaterals	
		Find the area of special quadrilaterals.
		Solve real-world problems involving the area of special quadrilaterals.
	Area of Irregular Figures	
		Calculate the area of irregular figures.
		Solve real-world problems involving the area of irregular figures.
Surface Area and Volume		
	Three-Dimensional Figures	
		Name and describe three-dimensional figures.
		Represent three-dimensional figures using nets.
	Surface Area of Prisms	
		Represent rectangular and triangular prisms using nets.
		Use nets of rectangular and triangular prisms to find surface area.
	Surface Area of Rectangular Pyramids	
		Calculate the surface area of square and rectangular pyramids using nets.
		Represent square and rectangular pyramids using nets.
	Exploring Volume of a Rectangular Prism	
		Calculate the volume of a right rectangular prism with fractional edge lengths.
		Calculate the volume of a right rectangular prism with whole number edge lengths.
	Finding a Formula for the Volume of a Rectangular Prism	
		Use the formulas $V = lwh$ and $V = Bh$ to find the volumes of right rectangular prisms.
	Solving Volume Problems with Formulas	
		Calculate the volume of a rectangular prism with one or more fraction or decimal side lengths using a formula.
		Find the value of an unknown dimension of a rectangular prism, given the remaining dimensions and the volume.