Course Name:	7th Grade Math		
Credits:	1		
Prerequisites:	n/a		
Description:	The idea behind the 7th grade Math class is to introduced topics and build on the students' prior knowledge by investigating new number sets and adding new skills and malleability within those number sets. Topics in this course include: The Number System, Expressions and Equations, Ratios and Proportional Relationships, and Geometry.		
Academic Standards:	Wisconsin State Standards in Mathematics (2011)		
Units:	**Unit Length:**	**Unit Standards:**	**Unit Outcomes:**
Integers	25 days	7.NS.1A-D, 7.NS.2A-D, 7.NS.3	Use and justify rules of addition, subtraction, multiplication, and division of integers. Find the absolute values of integers. Add, subtract, multiply, and divide integers.
Rational Numbers	20 days	7.NS.1A-D, 7.NS.2A-D, 7.NS.3	Add, subtract, multiply and divide rational numbers. Apply properties of operations as strategies to perform operations with rational numbers. Convert a rational number to a decimal using division.
Expressions and Equations	25 days	7.EE.1, 7.EE.2, 7.EE.4A	Add, subtract, factor, and expand linear expressions with rational coefficients. Understand that rewriting expressions in different forms can show how the quantities are related. Write, graph, and solve one-step equations (including negative numbers). Solve two-step equations. Compare algebraic solutions to arithmetic solutions.
Inequalities	20 days	7.EE.4B	Solve one-step inequalities involving integers and rational numbers. Solve two-step inequalities. Graph one- and two-step inequalities.
Ratios and Proportions	20 days	7.RP.1, 7.RP.2A-D, 7.RP.3	Find unit rates associated with ratios of fractions, areas, and other quantities in like or different units. Decide whether two quantities are proportional using ratio tables. Identify the constant of proportionality (unit rate) in tables, equations, diagrams, and verbal descriptions. Represent proportional relationships with equations. Use proportionality to solve ratio problems.
Constructions	20 days	7.G.2, 7.G.5	Use supplementary, complementary, vertical, and adjacent angles. Draw geometric shapes with given conditions, focusing on triangles and quadrilaterals. Represent proportional relationships with equations. use proportionality to solve ratio problems.
Circles and Areas	16 days	7.G.4, 7.G.6	Understand pi and its estimates. Use values of pi to estimate and calculate the circumference and area of circles. Find perimeters and areas of composite two-dimensional figures, including semi-circles.
Surface Area	4 days	7.G.6	Solve problems involving surface areas of objects, including prisms.
Percents	16 days	7.EE.3, 7.RP3	Compare fractions, decimals, and percents. Use proportionality to solve percent problems. Use the percent equation.
Probability and Statistics	9 days	7.SP.5, 7.SP.7A, 7.SP.8A-B	Understand that probability is the likelihood of an event occuring, expressed as a number from zero to one.Develop probability models and use them to find probabilities. Find the probabilities of compound events.

Unit Name: Integers	Length: 25 days
Standards: 7.NS.1A-D, 7.NS.2A-D, 7.NS.3	Outcomes: Use and justify rules of addition, subtraction, multiplication, and division of integers. Find the absolute values of integers. Add, subtract, multiply, and divide integers.
Essential Questions: How can you use integers to represent the velocity and speed of an object? Is the sum of two integers positive, negative, or zero? How are adding integers and subtracting integers related? Is the product of two integers positive, negative, or zero? Is the quotient of two integers positive, negative, or zero?	Learning Targets: Define the absolute value of a number. Find the absolute values of numbers. Apply real-life situations. Add integers. Show that the sum of a number and its opposite is zero. Subtract integers. Multiply integers. Divide integers.
Topic 1: Integers and Absolute Value	Length: 5 days
Standard(s): 7.NS.1, 7.NS. 2, 7.NS.3	Academic Vocabulary: integer, absolute value
Lesson Frame:	We will: Explore absolute value on a number line.
	I will: Find absolute values of given integers.
Lesson Frame:	We will: Investigate integers and absolute values.
	I will: Compare values.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 2: Adding Integers	Length: 5 days
Standard(s): 7.NS.1A, 7.NS.1B, 7.NS.1D, 7.NS.3	Academic Vocabulary: opposites, additive inverse
Lesson Frame:	We will: Demonstrate addition on a number line and with integer tiles.
	I will: Add integers with the same sign.
Lesson Frame:	We will: Practice addition on integers on a number line.
	I will: Add integers with different signs.
Lesson Frame:	We will: Discuss and review order of operations and properties of addition.
	I will: Add more than two integers with varying signs.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 3: Subtracting Integers	Length: 5 days
Standard(s): 7.NS.1C, 7.NS.1D, 7.NS.3	Academic Vocabulary: n/a
Lesson Frame:	We will: Explore what happens when subtracting integers using a number line and with integer tiles.
	I will: Subtract integers.
Lesson Frame:	We will: Evaluate expressions with subtraction.
	I will: Subtract integers.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 4: Multiplying Integers	Length: 5 days
Standard(s): 7.NS.2A, 7.NS.2C, 7.NS.3	Academic Vocabulary: n/a
Lesson Frame:	We will: Review multiplication as an expression of repeated addition.
	I will: Apply rules of integer addition.
Lesson Frame:	We will: Investigate the signs of products using positive and negative numbers.
	I will: Multiply integers with the same signs and with different signs.
Lesson Frame:	We will: Explore the application of exponents to multiplication of integers.
	I will: Evaluate expressions with exponents.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 5: Dividing Integers	Length: 5 days
Standard(s): 7.NS.2B, 7.NS.3	Academic Vocabulary: n/a
Lesson Frame:	We will: Review the results of multiplying integers, with regard to product signs.
	I will: Apply the same rules to quotient signs.
Lesson Frame:	We will: Investigate the signs of quotients using positive and negative numbers.
	I will: Divide integers with the same signs and with different signs.
Lesson Frame:	We will: Review given values and substitution.
	I will: Evaluate expressions with positive and negative integers.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:

Unit Name: Rational Numbers	Length: 20 days
Standards: 7.NS.1A-D, 7.NS.2A-D, 7.NS.3	Outcomes: Add, subtract, multiply and divide rational numbers. Apply properties of operations as strategies to perform operations with rational numbers. Convert a rational number to a decimal using division.
Essential Questions: How can you use a number line to order rational numbers? How can you use what you know about adding integers to add rational numbers? How can you use what you know about subtracting integers to subtract rational numbers? Why is the product of two negative rational numbers positive?	Learning Targets: Understand that a rational number is an integer divided by an integer. Convert rational numbers to decimals. Add rational numbers. Apply real-life situations. Subtract rational numbers. Multiply and divide rational numbers.
Topic 1: Rational Numbers	Length: 5 days
Standard(s): 7.NS.2B, 7.NS.2D	Academic Vocabulary: rational number, terminating decimal, repeating decimal
Lesson Frame:	We will: Review converting fractions to decimals using division.
	I will: Write rational numbers as decimals.
Lesson Frame:	We will: Review place value and simplifying fractions.
	I will: Write decimals as fractions.
Lesson Frame:	We will: Explore using a number line to show number order.
	I will: Order rational numbers on a number line.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 2: Adding Rational Numbers	Length: 5 days
Standard(s): 7.NS.1A, 7.NS.1B, 7.NS.1D, 7.NS.3	Academic Vocabulary: n/a
Lesson Frame:	We will: Review the sign rules for addition of integers.
	I will: Add rational numbers.
Lesson Frame:	We will: Review substitution, order of operations, and simplifying fractions.
	I will: Evaluate expression with rational numbers.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 3: Subtracting Rational Numbers	Length: 5 days
Standard(s): 7.NS.1C, 7.NS.1D, 7.NS.3	Academic Vocabulary: n/a
Lesson Frame:	We will: Review the sign rules for subtraction of integers.
	I will: Subtract rational numbers.
Lesson Frame:	We will: Investigate using a number line to find distance.
	I will: Find the distance between two numbers on a number line, and apply to real-life situations.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 4: Multiplying and Dividing Rational Numbers	Length: 5 days
Standard(s): 7.NS.2A, 7.NS.2B, 7.NS.2C, 7.NS.3	Academic Vocabulary: n/a
Lesson Frame:	We will: Review the sign rules for multiplication and division of integers.
	I will: Divide rational numbers and Multiply rational numbers.
Lesson Frame:	We will: Review properties of multiplication.
	I will: Multiply more than two rational numbers, and apply to real-life situations.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:

Unit Name: Expressions and Equations	Length: 25 days
Standards: 7.EE.1, 7.EE.2, 7.EE.4A	Outcomes: Add, subtract, factor, and expand linear expressions with rational coefficients. Understand that rewriting expressions in different forms can show how the quantities are related. Write, graph, and solve one-step equations (including negative numbers). Solve two-step equations. Compare algebraic solutions to arithmetic solutions.
Essential Questions: How can you simplify an algebraic expression? How can you use algebra tiles to add or subtract algebraic expressions? How can you use algebra tiles to solve addition or subtraction equations? How can you use multiplication or division to solve equations? How can you use algebra tiles to solve a two-step equation?	Learning Targets: Apply properties of operations to simplify algebraic expressions. Apply properties of operations to add and subtract linear expressions. Write simple equations. Solve equations using addition or subtraction. Solve equations using multiplication or division. Apply real-life situations. Solve two-step equations.
Topic 1: Algebraic Expressions	Length: 5 days
Standard(s): 7.EE.1, 7.EE.2	Academic Vocabulary: like terms, simplest form, coefficient, variable, constant
Lesson Frame:	We will: Discuss the parts that make up expressions and equations.
	I will: Identify terms and like terms.
Lesson Frame:	We will: Review order of operations and mathematical properties.
	I will: Simplify an algebraic expression.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 2: Adding and Subtracting Linear Expressions	Length: 5 days
Standard(s): 7.EE.1, 7.EE.2	Academic Vocabulary: linear expression
Lesson Frame:	We will: Explore the vertical and horizontal methods for finding the sum of expressions.
	I will: Add linear expressions.
Lesson Frame:	We will: Explore the vertical and horizontal methods for finding the difference of expressions.
	I will: Subtract linear expressions.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 3: Solving Equations Using Addition or Subtraction	Length: 5 days
Standard(s): 7.EE.4A	Academic Vocabulary: equivalent equations
Lesson Frame:	We will: Investigate the addition and subtraction properties of equality.
	I will: Solve equations using properties of equality.
Lesson Frame:	We will: Practice finding key words/phrases and numerical information in word sentences and word problems.
	I will: Write an equation from a word sentence or word problem.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 4: Solving Equations Using Multiplication or Division	Length: 5 days
Standard(s): 7.EE.4A	Academic Vocabulary: reciprocal
Lesson Frame:	We will: Investigate the multiplication and division properties of equality.
	I will: Solve equations using properties of equality.
Lesson Frame:	We will: Review using the multiplicative inverse property.
	I will: Solve an equation using a reciprocal.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 5: Solving Two-Step Equations	Length: 5 days
Standard(s): 7.EE.4A	Academic Vocabulary: n/a
Lesson Frame:	We will: Discuss the steps needed to solve a two-step equation.
	I will: Solve a two-step equation.
Lesson Frame:	We will: Review like terms.
	I will: Combine like terms before solving an equation.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:

Unit Name: Inequalities	Length: 20 days
Standards: 7.EE.4B	Outcomes: Solve one-step inequalities involving integers and rational numbers. Solve two-step inequalities. Graph one- and two-step inequalities.
Essential Questions: How can you use a number line to represent solutions of an inequality? How can you use addition or subtraction to solve an inequality? How can you use multiplication or division to solve an inequality?	Learning Targets: Write and graph inequalities. Use substitution to check whether a number is a solution of an inequality. Solve inequalities using addition or subtractions. Apply real-life situations. Solve inequalities using multiplication or division. Solve multi-step inequalities.
Topic 1: Writing and Graphing Inequalities	Length: 5 days
Standard(s): 7.EE.4B	Academic Vocabulary: inequality, solution of an inequality, solution set, graph of an inequality
Lesson Frame:	We will: Review the inequality symbols and practice finding key words/phrases and numerical values in word sentences.
	I will: Write an inequality.
Lesson Frame:	We will: Explore using substitution to check possible answers.
	I will: Check solutions to inequalities.
Lesson Frame:	We will: Explore using a number line graph to visually show the possible solutions of an inequality.
	I will: Graph an inequality.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 2: Solving Inequalities Using Addition or Subtraction	Length: 5 days
Standard(s): 7.EE.4B	Academic Vocabulary: properties of inequality
Lesson Frame:	We will: Investigate using the addition property of inequality.
	I will: Solve an inequality using addition.
Lesson Frame:	We will: Practice using the subtraction property of inequality.
	I will: Solve an inequality using subtraction.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 3: Solving Inequalities Using Multiplication or Division	Length: 5 days
Standard(s): 7.EE.4B	Academic Vocabulary: n/a
Lesson Frame:	We will: Explore using multiplication and division properties of inequality with positive numbers.
	I will: Solve an inequality using multiplication or division with positive numbers.
Lesson Frame:	We will: Explore using multiplication and division properties of inequality with negative numbers.
	I will: Solve an inequality using multiplication or division with negative numbers.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 4: Solving Two-Step Inequalities	Length: 5 days
Standard(s): 7.EE.4B	Academic Vocabulary: n/a
Lesson Frame:	We will: Review steps and rules for solving two-step equations, and realize they are the same for two-step inequalities.
	I will: Solve two-step inequalities.
Lesson Frame:	We will: Interpret inequality graphs to decide the solutions.
	I will: Graph an inequality.
Lesson Frame:	We will: Explore situations in which inequalities are used and solved for solutions.
	I will: Apply inequalities to real-life situations.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:

Unit Name: Ratios and Proportions	Length: 20 days
Standards: 7.RP.1, 7.RP.2A-D, 7.RP.3	Outcomes: Find unit rates associated with ratios of fractions, areas, and other quantities in like or different units. Decide whether two quantities are proportional using ratio tables. Identify the constant of proportionality (unit rate) in tables, equations, diagrams, and verbal descriptions. Represent proportional relationships with equations. Use proportionality to solve ratio problems.
Essential Questions: How do rates help you describe situations? How can proportions help you decide when things are "fair"? How can you write a proportion that solves a problem in real-life? How can you use ratio tables and cross products to solve proportions?	Learning Targets: Find ratios, rates, and unit rates. Find ratios and rates involving ratios of fractions. Use equivalent ratios to determine whether two ratios form a proportion. Use the Cross Products Property to determine whether two ratios form a proportion. Write proportions. Solve proportions. Solve proportions using multiplication or the Cross Products Property. Use a point on a graph to write and solve proportions.
Topic 1: Ratios and Rates	Length: 5 days
Standard(s): 7.RP.1, 7.RP.3	Academic Vocabulary: ratio, rate, unit rate, complex fraction
Lesson Frame:	We will: Discuss the definitions and examples of ratio and rate.
	I will: Find ratios and rates.
Lesson Frame:	We will: Investigate ratio tables and graphs.
	I will: Find a rate from a ratio table and a graph.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 2: Proportions	Length: 5 days
Standard(s): 7.RP.2A	Academic Vocabulary: proportion, proportional, cross products
Lesson Frame:	We will: Investigate ratios as fractions.
	I will: Determine whether two ratios form a proportion.
Lesson Frame:	We will: Investigate ratios as fractions or complex fractions and by using substitution.
	I will: Determine whether two quantities are proportional.
Lesson Frame:	We will: Explore the Cross Products Property.
	I will: Identify proportional relationships.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 3: Writing Proportions	Length: 5 days
Standard(s): 7.RP.2C, 7.RP.3	Academic Vocabulary: n/a
Lesson Frame:	We will: Explore using tables, columns, or rows to formulate proportions.
	I will: Write a proportion.
Lesson Frame:	We will: Practice writing and solving proportions using mental math.
	I will: Solve a simple proportion.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 4: Solving Proportions	Length: 5 days
Standard(s): 7.RP.2B, 7.RP.2C	Academic Vocabulary: n/a
Lesson Frame:	We will: Discuss various methods to use when solving proportions.
	I will: Solve proportions using multiplication.
Lesson Frame:	We will: Practice using various methods to solve proportions.
	I will: Solve proportions using the Cross Product Property.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:

Unit Name: Constructions	Length: 20 days
Standards: 7.G.2, 7.G.5	Outcomes: Use supplementary, complementary, vertical, and adjacent angles. Draw geometric shapes with given conditions, focusing on triangles and quadrilaterals. Represent proportional relationships with equations. Use proportionality to solve ratio problems.
Essential Questions: What can you conclude about the angles formed by two intersecting lines? How can you classify two angles as complementary or supplementary? How can you classify triangles? How can you classify quadrilaterals?	Learning Targets: Identify adjacent and vertical angles. Find angle measures using adjacent and vertical angles. Classify pairs of angles as complementary, supplementary, or neither. Find angle measures using complementary and supplementary angles. Understand that the sum of the angle measures of any triangle is 180 degrees. Find missing angle measures in triangles. Understand that the sum of the angle measures of any quadrilateral is 360 degrees. Find missing angle measures in quadrilaterals.
Topic 1: Adjacent and Vertical Angles	Length: 5 days
Standard(s): 7.G.5	Academic Vocabulary: adjacent angles, vertical angles, congruent angles
Lesson Frame:	We will: Explore the requirements and characteristics of certain angles.
	I will: Name angles.
Lesson Frame:	We will: Investigate missing angle measures and use prior knowledge about angles.
	I will: Identify adjacent or vertical angles and find the missing values associated with them.
Lesson Frame:	We will: Practice using a protractor.
	I will: Construct angles.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 2: Complementary and Supplementary Angles	Length: 5 days
Standard(s): 7.G.5	Academic Vocabulary: complementary angles, supplementary angles
Lesson Frame:	We will: Discuss what complementary and supplementary angles are.
	I will: Classify pairs of angles.
Lesson Frame:	We will: Practice using the definitions of angles.
	I will: Identify complementary and supplementary angles and solve for the missing value.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 3: Triangles	Length: 5 days
Standard(s): 7.G.2, 7.G.5	Academic Vocabulary: congruent sides
Lesson Frame:	We will: Investigate different classifications of angles by their angle measures and side lengths.
	I will: Classify triangles.
Lesson Frame:	We will: Explore the idea of all triangles having the same interior angle measure sum.
	I will: Find angle measures of triangles.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 4: Quadrilaterals	Length: 5 days
Standard(s): 7.G.2	Academic Vocabulary: quadrilateral, kite, rhombus, trapezoid, parallelogram
Lesson Frame:	We will: Investigate the various properties of different 4-sided shapes.
	I will: Classify quadrilaterals.
Lesson Frame:	We will: Explore the concept of all interior angle measures of quadrilaterals the same sum.
	I will: Find an angle measure of a quadrilateral.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:

Unit Name: Circles and Area	Length: 16 days
Standards: 7.G.4, 7.G.6	Outcomes: Understand pi and its estimates. Use values of pi to estimate and calculate the circumference and area of circles. Find perimeters and areas of composite two-dimensional figures, including semi-circles.
Essential Questions: How can you find the circumference of a circle? How can you find the perimeter of a composite figure? How can you find the area of a circle? How can you find the area of a composite figure?	Learning Targets: Describe a circle in terms of radius and diameter. Understand the concept of pi. Find circumference of circles and perimeters of semicircles. Find perimeters of composite figures. Find areas of circles and semicircles. Find areas of composite figures by separating them into familiar figures. Apply real-life situations.
Topic 1: Circles and Circumference	Length: 4 days
Standard(s): 7.G.4	Academic Vocabulary: circle, center, radius, diameter, circumference, pi, semicircle
Lesson Frame:	We will: Discuss the structure of a circle and its components.
	I will: Find a radius and a diameter.
Lesson Frame:	We will: Investigate the formula for distance around a circle.
	I will: Find circumference of circles.
Lesson Frame:	We will: Explore adapting the circumference formula to be used for semicircles.
	I will: Find the perimeter of a semicircle region.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 2: Perimeters of Composite Figures	Length: 4 days
Standard(s): 7.G.4	Academic Vocabulary: composite figure
Lesson Frame:	We will: Investigate the makeup of composite figures.
	I will: Estimate a perimeter using grid paper.
Lesson Frame:	We will: Practice using formulas and substitution with composite figures.
	I will: Find a perimeter.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 3: Areas of Circles	Length: 4 days
Standard(s): 7.G.4	Academic Vocabulary: n/a
Lesson Frame:	We will: Discuss the area of a circle formula.
	I will: Find areas of circles.
Lesson Frame:	We will: Adapt the area of a circle formula.
	I will: Find the area of a semicircle.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 4: Area of Composite Figures	Length: 4 days
Standard(s): 7.G.6	Academic Vocabulary: n/a
Lesson Frame:	We will: Discuss and review prior knowledge about areas of circles and other 2D figures.
	I will: Find an areas using grid paper.
Lesson Frame:	We will: Practice using area formulas and substitution.
	I will: Find areas of composite figures.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:

Unit Name: Surface Area	Length: 4 days		
Standards: 7.G.6	Outcomes: Solve problems involving surface areas of objects, including prisms.		
Essential Questions: How can you find the surface area of a prism?	Learning Targets: Use two-dimensional nets to represent three-dimensional solids. Find surface areas of rectangular and triangular prisms.		
Topic 1: Surface Area of Prisms	Length: 4 days		
Standard(s): 7.G.6	Academic Vocabulary: lateral surface area		
Lesson Frame:	We will: Discuss and create nets to display 3D objects in a 2D plane.		
	I will: Find the surface area of a rectangular and a triangular prism.		
Lesson Frame:	We will: Explore the rules and formula for surface area of a cube.		
	I will: Find the surface area of a cube.		
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:		

Unit Name: Percents	Length: 16 days
Standards: 7.EE.3, 7.RP3	Outcomes: Compare fractions, decimals, and percents. Use proportionality to solve percent problems. Use the percent equation.
Essential Questions: How does the decimal point move when you rewrite a percent as a decimal and when you rewrite a decimal as a percent? How can you order numbers that are written as fractions, decimals, and percents? How can you use models to estimate percent questions? How can you use an equivalent form of the percent proportion to solve a percent problem?	Learning Targets: Write percents as decimals. Write decimals as percents. Apply real-life situations. Compare and order fractions, decimals, and percents. Use the percent proportion to find parts, wholes, and percents. Use the percent equation to find parts, wholes, and percents.
Topic 1: Percents and Decimals	Length: 4 days
Standard(s): 7.EE.3	Academic Vocabulary: n/a
Lesson Frame:	We will: Review place-value to hundredths place, and review division by 100.
	I will: Write percents as decimals.
Lesson Frame:	We will: Discuss what happens when you multiply a decimal by 100.
	I will: Write decimals as percents.
Lesson Frame:	We will: Review reducing fractions.
	I will: Write a fraction as a percent and a decimal.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 2: Comparing and Ordering Fractions, Decimals, and Percents	Length: 4 days
Standard(s): 7.EE.3	Academic Vocabulary: n/a
Lesson Frame:	We will: Review using a number line to order values.
	I will: Compare fractions, decimals, and percents.
Lesson Frame:	We will: Explore situations in the real-world that use various representations of values.
	I will: Apply real-life situations.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 3: The Percent Proportion	Length: 4 days
Standard(s): 7.RP.3	Academic Vocabulary: n/a
Lesson Frame:	We will: Review percents as being a part of a whole, and discuss *is over of*.
	I will: Find a percent.
Lesson Frame:	We will: Review solving simple equations and writing proportional relationships.
	I will: Find a part or finding a whole.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:
Topic 4: The Percent Equation	Length: 4 days
Standard(s): 7.RP.3, 7.EE.3	Academic Vocabulary: n/a
Lesson Frame:	We will: Explore the percent equation.
	I will: Find a part of a number.
Lesson Frame:	We will: Practice using the percent equation.
	I will: Find a percent.
Lesson Frame:	We will: Review estimation and checking for reasonableness.
	I will: Find a whole.
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:

Unit Name: Probability and Statistics	Length: 9 days		
Standards: 7.SP.5, 7.SP.7A, 7.SP.8A-B	Outcomes: Understand that probability is the likelihood of an event occuring, expressed as a number from zero to one.Develop probability models and use them to find probabilities. Find the probabilities of compound events.		
Essential Questions: In an experiment, how can you determine the number of possible results? How can you describe the likelihood of an event? How can you find the number of possible outcomes of one or more events?	Learning Targets: Identify and count the outcomes of experiments. Understand the concept .of probability and the relationship between probability and likelihood. Find probabilities of events. Use tree diagrams, tables, or a formula to find the number of possible outcomes. Find probabilities of compound events.		
Topic 1: Outcomes and Events	Length: 3 days		
Standard(s): 7.SP.5	Academic Vocabulary: experiment, outcomes, event, favorable outcomes		
Lesson Frame:	We will: Discuss what is involved in an experiment and define the terms.		
	I will: Identify outcomes.		
Lesson Frame:	We will: Explore further the possibilities and results an event can have.		
	I will: Count outcomes.		
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:		
Topic 2: Probability	Length: 3 days		
Standard(s): 7.SP.5, 7.SP.7A	Academic Vocabulary: probability		
Lesson Frame:	We will: Investigate the parameters of probabilities and how they can be represented.		
	I will: Describe the likelihood of an event.		
Lesson Frame:	We will: Discuss the probability ratio.		
	I will: Find and use a probability.		
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:		
Topic 3: Compound Events	Length: 3 days		
Standard(s): 7.SP.8A, 7.SP.8B	Academic Vocabulary: sample space, Fundamental Counting Principle, compound event		
Lesson Frame:	We will: Explore what a sample space is and how it can be represented.		
	I will: Find a sample space.		
Lesson Frame:	We will: Discuss the Fundamental Counting Principle.		
	I will: Find the total number of possible outcomes.		
Lesson Frame:	We will: Investigate compound events and how they can be represented.		
	I will: Find the probability of a compound event.		
Performance Tasks: any or all- exit tickets, assignments (various forms), quiz, test	Notes:		

September	October	November	December	January	February	March	April	May	June