Course Information

Grade(s):	**6**
Discipline/Course:	**Mathematics / Transition to Pre-Algebra**
Course Title:	**TPA (Transition to Pre-Algebra)**
Prerequisite(s):	**Math 5**
Course Description: *Program of Studies*	In the Transition to Pre-Algebra course, the instructional time should focus on six critical areas: (1) completing the understanding of division of fractions; (2) connecting ratio and rate to whole number multiplication and division, and using concepts of ratio and rate to solve problems, which includes negative numbers; (3) writing, interpreting, and using expressions and equations; (4) developing understanding of statistical thinking, (5) extending the concept of area to surface area and volume, and (6) and extending the notion of number to the system of rational numbers for all operations. 1. Students use the meaning of fractions, the meanings of multiplication and division, and the relationship between multiplication and division to understand and explain why the procedures for dividing fractions make sense. Students use these operations to solve problems. Students extend their previous understanding of numbers and the ordering of numbers to the full system of rational numbers, which includes negative rational numbers, and in particular negative integers. They reason about the order and absolute value of rational numbers and about the location of points in all four quadrants of the coordinate plane. 2. Students use reasoning for multiplication and division to solve ratio and rate problems involving quantities. By viewing equivalent ratios and rates as deriving from, and extending, pairs of rows (or columns) in the multiplication table, and by analyzing simple drawings that indicate the relative size of quantities, students connect their understanding of multiplication and division with ratios and rates. Students expand the scope of problems for which they can use multiplication and division to solve problems, and they connect ratios and fractions. Students solve a wide variety of problems involving ratios and rates.

	3. Students understand the use of variables in mathematical expressions. They write expressions and equations that correspond to given situations, evaluate expressions, and use expressions and formulas to solve problems. Students understand that expressions in different forms can be equivalent, and they use the properties of operations to rewrite expressions in equivalent forms. Students know that the solutions of an equation are the values of the variables that make the equation true. Students use properties of operations and the idea of maintaining the equality of both sides of an equation to solve simple one-step equations. Students construct and analyze tables, such as tables of quantities that are in equivalent ratios, and they use equations (such as $3x = y$) to describe relationships between quantities. 4. Building on and reinforcing their understanding of numbers, students begin to develop their ability to think statistically. Students recognize that a data distribution may not have a definite center and that there are different ways to measure center yield different values. The median measures center in the sense that it is roughly the middle value. The mean measures center in the sense that it is the value that each data point would take on if the total of the data values were redistributed equally, and also in the sense that it is a balance point. Students recognize that a measure of variability (interquartile range or mean absolute deviation) can also be useful for summarizing data because two very different sets of data can have the same mean and median yet be distinguished by their variability. Students learn to describe and summarize numerical data sets, identifying clusters, peaks, gaps, and symmetry, considering the context in which the data were collected. 5. Students in Transition to Pre-Algebra also build on their work with area in elementary school by reasoning about relationships among shapes to determine area, surface area, and volume. They find areas of right triangles, other triangles, and special quadrilaterals by decomposing these shapes, rearranging or removing pieces, and relating the shapes to rectangles. Using these methods, students discuss, develop, and justify formulas for areas of triangles and parallelograms. Students find areas of polygons and surface areas of prisms and pyramids by decomposing them into pieces whose area they can determine. They reason about right rectangular prisms with fractional side lengths to extend formulas for the volume of a right rectangular prism to fractional side lengths. They prepare for work on scale drawings and constructions in Grade 7 by drawing polygons in the coordinate plane.

	6. Students develop a unified understanding of numbers, recognizing fractions, decimals (that have a finite or a repeating decimal representation), and percents as different representations of rational numbers. Students extend addition, subtraction, multiplication, and division to all rational numbers, maintaining the properties of operations and the relationships between addition and subtraction, and multiplication and division. By applying these properties, and by viewing negative numbers in terms of everyday contexts (e.g., amounts owed or temperatures below zero), students explain and interpret the rules for adding, subtracting, multiplying, and dividing with negative numbers. They use the arithmetic of rational numbers as they formulate expressions and equations in one variable and use these equations to solve problems.
Course Essential Questions:	● How do patterns and functions help us describe data and physical phenomena and solve a variety of problems? ● How are quantitative relationships represented by numbers? ● How do geometric relationships and measurements help us to solve problems and make sense of our world? ● How can collecting, organizing and displaying data help us analyze information and make reasonable and informed decisions?
Course Enduring Understandings:	Insights learned from exploring generalizations through the essential questions. (Students will understand that…) ● Patterns and functional relationships can be represented and analyzed using a variety of strategies, tools, and technologies. ● Quantitative relationships can be expressed numerically in multiple ways in order to make connections and simplify calculations using a variety of strategies, tools and technologies. ● Shapes and structures can be analyzed, visualized, measured and transformed using a variety of strategies, tools, and technologies. ● Data can be analyzed to make informed decisions using a variety of strategies, tools, and technologies.
Duration:	One year

Course Materials/Resources:	EdGems Course 1A

Unit Number and Title:	**Unit 1: Ratios and Rates**
Resource(s):	EdGems Course 1A: Unit 1
Learning Goals	
Standard(s):	6.RP.1 (Major Standard) Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. 6.RP.2 (Major Standard) 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. 6.RP.3 (Major Standard) 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. a) 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. b) Solve unit rate problems including those involving unit pricing and constant speed. c) Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities d) Understand the concept of pi as the ratio of the circumference of a circle to its diameter.
Essential Question(s):	● What is a ratio? ● What is a rate? ● What models can be used to visualize ratios and rates? ● What is a unit rate? ● How can we write and compare rates? ● How can you make a scale drawing?
Enduring Understanding(s):	● A rate is a set of infinitely many equivalent ratios.

	• Several ways of reasoning, all grounded in sense making, can be generalized into algorithms for solving proportion problems. • A proportion is a relationship of equality between two ratios.
Learning Goal(s): *Students will be able to use their learning to:*	• Simplify and write ratios three ways. • Create ratios that represent the same value • Use equivalent rates to solve problems • Compare rates to solve problems • Convert measurements within systems and between systems • Use the relationship between pi and diameter of a circle to find circumference

Unit Number and Title:	**Unit 2: Multi Digit Operations**
Resource(s):	EdGems Course 1A: Unit 2
Learning Goals	
Standard(s):	6.NS.2: Fluently divide multi-digit numbers using the standard algorithm. 6.NS.3: Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. 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.
Essential Question(s):	● What algorithms allow you to fluently perform multi digit operations?
Enduring Understanding(s):	● Rational numbers allow us to make sense of situations that involve numbers that are not whole. ● A general algorithm exists for dividing decimals. This algorithm is broadly applicable and reasonably efficient.
Learning Goal(s): *Students will be able to use their learning to:*	● Find sums and differences involving decimals ● Find products of expressions involving decimals ● Find quotients of expressions of whole numbers divided by 1-digit numbers ● Find quotients of expressions of whole numbers divided by multi-digit whole numbers ● Find quotients of expressions involving decimals ● Find the greatest common factor and the least common multiple of two whole numbers

Unit Number and Title:	**Unit 3: Proportional Relationships**
Resource(s):	EdGems Course 1A: Unit 3
Learning Goals	
Standard(s):	7.RP.2-Recognize and represent proportional relationships between quantities a.) Decide whether two quantities are in a proportional relationship b.) Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships d.)Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points (0, 0) and (1, r) where r is the unit rate. 7.RP.3- Use proportional relationships to solve multi-step ratio and percent problems.
Essential Question(s):	● How can you connect percents and ratios?
Enduring Understanding(s):	● A proportion is a relationship of equality between two ratios. ● In a proportion, the ratio of two quantities remains constant as the corresponding values of the quantities change.
Learning Goal(s): *Students will be able to use their learning to:*	● Determine if ratios form a proportion ● Solve a proportion with a missing value ● Solve real world problems by writing and solving proportions ● Recognize proportional relationships from a table and graph ● Write equations for proportional relationships

Unit Number and Title:	**Unit 4: Percents**
Resource(s):	EdGems Course 1A: Unit 4
Learning Goals	
Standard(s):	7.RP.3- Use proportional relationships to solve multi-step ratio and percent problems. 7.NS.2 Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. d) Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.
Essential Question(s):	● How can you represent rational numbers in different forms? ● What does a percent mean? ● How can you connect percents and ratios?
Enduring Understanding(s):	● Reasoning with ratios involves attending to and coordinating two quantities. ● A ratio is a multiplicative comparison of two quantities, or is it a joining of two quantities in a composed unit. ● A number of mathematical connections link ratios and fractions. ● Ratios can be meaningfully reinterpreted as quotients. ● A proportion is a relationship of equality between two ratios. ● In a proportion, the ratio of two quantities remains constant as the corresponding values of the quantities change.
Learning Goal(s): *Students will be able to use their learning to:*	1. Write percents as fractions and decimals 2. Write fractions and decimals as percents 3. Find the percent of a number 4. Solve problems involving discounts and markups

Unit Number and Title:	**Unit 5: Fractions Operations**
Resource(s):	Edgems Course 1A: Unit 5
Learning Goals	
Standard(s):	5.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. 5.NF.6 Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem. 6.NS.1 Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions 7.RP.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units.
Essential Question(s):	● How can we divide a fraction by a fraction? ● How can you create a visual model of the multiplication and division of fractions?
Enduring Understanding(s):	● Rational numbers allow us to make sense of situations that involve numbers that are not whole.
Learning Goal(s): *Students will be able to use their learning to:*	1. Multiply fractions using models and the algorithm. 2. Use models to divide fractions 3. Find quotients of expressions involving two fractions 4. Find products and quotients of expressions that include mixed numbers

Unit Number and Title:	**Unit 6: Expressions**
Resource(s):	EdGems Course 1A: Unit 6
Learning Goals	
Standard(s):	6.EE.1 (Major Standard) Write and evaluate numerical expressions involving whole-number exponents. 6.EE.2 (Major Standard) Write, read, and evaluate expressions in which letters stand for numbers. a) Write expressions that record operations with numbers and with letters standing for numbers. b) 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. . 6.EE.3 (Major Standard) Apply the properties of operations to generate equivalent expressions. 6.EE.4 (Major Standard) Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). 6.EE.6 (Major Standard) 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.
Essential Question(s):	● How can we apply the order of operations to evaluating algebraic expressions? ● How can we use the properties of algebra to simplify expressions?
Enduring Understanding(s):	● Expressions are foundational for Algebra; they serve as building blocks for work with equations and functions. ● Variables are tools for expressing mathematical ideas clearly and concisely. They have many different meanings, depending on the context and purpose.
Learning Goal(s): *Students will be able to use their learning to:*	1. Write and compute expressions with powers. 2. Find values of expressions using the order of operations 3. Write expressions involving variables.

	4. Evaluate algebraic expressions 5. Recognize and combine like terms to generate equivalent expressions 6. Use the Distributive Property to perform calculations and simplify expressions

Unit Number and Title:	**Unit 7: One Variable Equations**
Resource(s):	Ed Gems Course 1A: Unit 7
Learning Goals	
Standard(s):	6.EE.5 (Major Standard) 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. 6.EE.7 (Major Standard) 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. 6.RP.3c (Major Standard) 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. c. 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
Essential Question(s):	● How can you determine if a value is a solution to an equation? ● How do you balance an equation to solve for a variable? ● What are inverse operations? ● How can we use an algebraic equation to solve percent problems?
Enduring Understanding(s):	● The equal sign indicates that two expressions are equivalent. It can also be used in defining or naming a single expression or function rule. ● A general algorithm exists for solving linear equations. This algorithm is broadly applicable and reasonably efficient.
Learning Goal(s):	● Determine if a number is a solution of an equation

Students will be able to use their learning to:	● Solve equations involving addition and subtraction ● Solve equations involving multiplication and division ● Solve percent equations.

Unit Number and Title:	**Unit 8: Rational Numbers and The Coordinate Plane**
Resource(s):	Ed Gems Course 1A: Unit 8
Learning Goals	
Standard(s):	6.EE.8 (Major Standard) 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. 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. 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. a) 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. b) 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. c) 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. 6.NS.7 Understand ordering and absolute value of rational numbers. a) Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. b) Write, interpret, and explain statements of order for rational numbers in real-world contexts. c) 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.

	d) Distinguish comparisons of absolute value from statements about order. 6.NS.8 (Major Standard) 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. 6.G.3 (Supporting Standard) 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.
Essential Question(s):	● When do we use positive and negative numbers to describe situations? ● What is absolute value? ● How do we compare and order positive and negative numbers? ● How can we graph points on a coordinate plane? ● How do ordered pairs represent a location on a coordinate plane ● How can we add and subtract integers? rational numbers? ● How can we visualize adding and subtracting negative numbers? ● How can we multiply and divide integers? rational numbers? ● How can we apply the order of operations when working with expressions containing negative numbers?
Enduring Understanding(s):	● Rational numbers allow us to make sense of situations that involve numbers that are not whole ● Integers are useful for noting relative changes or values. ● Solving a system equation can be done with tables, graphs and equations. ● The different methods to solve a system of equations can be more efficient than others, based on the situation and context
Learning Goal(s): *Students will be able to use their learning to:*	1. Compare and order integers and use integers to represent real-world situations 2. Order and compare rational numbers 3. Write inequalities and display the solution on a graph. 4. Graph points on the coordinate plane 5. Use properties of quadrilaterals to solve problems on a coordinate plane

Unit Number and Title:	**Unit 9: Two Variable Equations**
Resource(s):	Ed Gems Course 1A: Unit
Learning Goals	
Standard(s):	6.EE.9 (Major Standard) 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. 6.NS.8 (Major Standard) 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.
Essential Question(s):	● How can we organize a series of inputs and outputs within a table? ● How can we write equations when given a table, graph, or situation? ● How can we translate an equation to a graph? ● What are independent and dependent variables?
Enduring Understanding(s):	● Linear equations can be solved by symbolic, graphical, and numerical methods; on some occasions and in some contexts, one solution method may be more elegant, efficient, or informative than others.
Learning Goal(s): *Students will be able to use their learning to:*	1. Create input-output tables for equations with two variables 2. Write equations for tables, graphs and contextual situations 3. Graph a two-variable equation on a coordinate plane.

Unit Number and Title:	**Unit 10: Area and Volume**
Resource(s):	Ed Gems Course 1A: Unit 10
Learning Goals	
Standard(s):	6.G.1 (Supporting Standard) Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems. 6.G.2 (Supporting Standard) 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. 6.G.4 (Supporting Standard) 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. 6.NS.3 (Additional Standard) Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. 6.EE.7 (Major Standard) 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.
Essential Question(s):	● How can we find the area of 2D shapes? ● How can you find the volume of 3D shapes with decimal or fraction side lengths? ● How can you determine missing dimensions of a figure when given the area or volume?
Enduring Understanding(s):	● Representation of geometric ideas and relationships allows multiple approaches to geometric problems and connects geometric interpretations to other contexts.

	● Area represents the space enclosed by a 2-dimensional figure. ● Volume represents the space enclosed by a 3-dimensional object.
Learning Goal(s): *Students will be able to use their learning to:*	1. Calculate areas of polygons with side lengths that are fractions 2. Calculate areas and perimeters of polygons with side lengths that are decimals 3. Find the areas of composite figures by breaking them down into known shapes 4. Draw nets for solids and find the surface area of a solid using a net 5. Find the volume of rectangular prisms

Unit Number and Title:	**Unit 11: Statistics**
Resource(s):	Ed Gems Course 1A: Unit 11
Learning Goals	
Standard(s):	6.SP.1 (Additional Standard) Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. 6.SP.2 (Additional Standard) 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. 6.SP.3(Additional Standard) 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. 6.SP.4 (Additional Standard) Display numerical data in plots on a number line, including dot plots, histograms, and box plots. 6.SP.5 (Additional Standard) Summarize numerical data sets in relation to their context
Essential Question(s):	● What is a statistical question? ● What are the different ways we can present data? ● How do we interpret data? ● How do we analyze data?
Enduring Understanding(s):	● Statistics are a useful way to find the meaning behind the data
Learning Goal(s): *Students will be able to use their learning to:*	● Identify statistical questions as well as different types of data ● Find measures of center ● Make, read and interpret dot plots ● Make, read and interpret histograms

	● Make, read and interpret box-and-whisker plots. ● Analyze how characteristics of a data set affect the measures of center and variation ● Find and use mean absolute deviation to describe the spread of a data set

Unit Number and Title:	**Unit 12: Sums and Differences of Rational Numbers**
Resource(s):	EdGems Course 1A: Unit 12
Learning Goals	
Standard(s):	7.NS.1 (Major Standard) Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. a. Describe situations in which opposite quantities combine to make 0. b. Understand p + q as the number located a distance |q| from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts. c. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts. d. Apply properties of operations as strategies to add and subtract rational numbers. 7.NS.3 (Major Standard) Solve real-world and mathematical problems involving the four operations with rational numbers.
Essential Question(s):	● Which models can give us concrete understanding of adding and subtracting integers? ● Can we generate a list of "rules" that can be applied to adding and subtracting integers as well as rational numbers?
Enduring Understanding(s):	● Fractions and decimals express a relationship between numbers. ● Rational numbers allow us to make sense of situations that involve numbers that are not whole.
Learning Goal(s): *Students will be able to use their learning to:*	● Add and Subtract Integers ● Add and Subtract Rational Numbers

Unit Number and Title:	**Unit 13: Products and Quotients of Rational Numbers**
Resource(s):	EdGems Course 1A: Unit 13
Learning Goals	
Standard(s):	7.NS.2 Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers a) Understand that multiplication is extended from fractions to rational numbers by requiring operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts. b) Understand that integers can be divided, provided that the divisor in not zero, and every quotient of integers (with non-zero divisor) is a rational number. Interpret quotients of rational numbers by describing real-world contexts. c) Apply properties of operations as strategies to multiply and divide rational numbers. 7.NS.3 Solve real-world and mathematical problems involving the four operations with rational numbers. 7.EE.1 Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients. 7.EE.2 Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related 7.EE.3 Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies.
Essential Question(s):	● How can we model the multiplication and division of integers? ● What strategies can we use to multiply and divide rational numbers?

	• How can we simplify complex expressions to create equivalent expressions?
Enduring Understanding(s):	• Fractions and decimals express a relationship between numbers. • Rational numbers allow us to make sense of situations that involve numbers that are not whole.
Learning Goal(s): *Students will be able to use their learning to:*	• Multiply and Divide Integers • Multiply Rational Numbers • Divide Rational Numbers • Use the Order of Operations with Rational Numbers • Create Equivalent Expressions