	Essential Standards	Essential Standard (s)	Supporting Standards	Supporting Standard (s)
		Learning Targets		Learning Targets
Unit: 1	MGSE6.NS.1	MGSE6.NS.1	MGSE6.NS.2	MGSE6.NS.2
	Interpret and compute quotients of	I can interpret what the quotient	Fluently divide multi-digit	I can understand place value
Number System	fractions, and solve word problems	represents in mathematical and	numbers using the standard	of multi-digit numbers and
Fluency	involving division of fractions by	real-world problems.	algorithm.	use it when dividing.
	fractions, including reasoning strategies such as using visual	I can understand that multiplication	MGSE6.NS.3	I can apply the rules of
	fraction models and equations to	and division are inverse operations	Fluently add, subtract, multiply,	division to solve multi-digit
Estimated	represent the problem		and divide multi-digit decimals	problems.
Teaching	représent die problem.	I can divide fractions procedurally	using the standard algorithm for	
Time:	MGSE6 NS 4	using the multiplicative inverse	each operation.	I can know that division is the
	Find the common multiples of two			inverse of multiplication.
20-25 days	whole numbers less than or equal	MGSF6.NS.4		I can use compatible numbers
, , , , , , , , , , , , , , , , , , ,	to 12 and the common factors of	L can using numbers 1-100		to estimate the
	two whole numbers less than or	understand what a factor is (a		reasonableness of answers.
	equal to $100$ a Find the greatest	whole number that divides without		
	common factor of 2 whole numbers	a remainder into another number)		I can relate division to
	and use the distributive property to			repeated subtraction.
	express a sum of two whole	I can using numbers less than or		
	numbers 1-100 with a common	equal to 12 understand what a		I can develop fluency with
	factor as a multiple of a sum of two	multiple is (a whole number that is		the standard algorithm for
	whole numbers with no common	a product of two factors)		division of multi-digit whole
	factors. (GCF) Example: $36 + 8 =$			numbers.
	4(9+2) b. Apply the least common	I can calculate greatest common		MCSE6 NS 3
	multiple of two whole numbers less	factor using multiple methods.		L can understand decimal
	than or equal to 12 to solve real-			nlace value
	world problems.	I can calculate least common		
	1	multiple using multiple methods.		I can fluently add, subtract,
				multiply and divide multi-
		I can, using the distributive		digit decimal numbers.
		property, decompose numbers into		
		a common factor times a sum.		I can recall estimation strategies
				for adding, subtracting,
		I can solve real-world problems		multiplying and dividing
		utilizing greatest common factor		decimals.
		and least common multiple.		
		1		

	Essential Standards	Essential Standard (s) Learning Targets	Supporting Standards	Supporting Standard (s) Learning Targets
Unit: 2	MGSE6.RP.3	MGSE6.RP.3	MGSE6.RP.1	MGSE6.RP.1
Rate, Ratio and Proportional	solve real-world and mathematical problems utilizing strategies such as tables of equivalent ratios, tape diagrams (bar models), double	I can identify equivalent ratios. I can create a table using equivalent	Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.	I can identify a ratio. I can describe a ratio between
Reasoning Using Equivalent	number line diagrams, and/or equations	I can find missing values of a table using equivalent ratios.	<b>MGSE6.RP.2</b> Understand the concept of a unit rate a/b associated with a ratio	I can explain a ratio by drawing a picture.
Estimated Teaching		I can plot pairs of values on a coordinate plane.	a:b with $b \neq 0$ (b not equal to zero), and use rate language in the context of a ratio	I can write a ratio in different forms (fraction, colon, word form).
15-20 days		I can create and solve real-world ratio problems.	relationship.	I can compare two quantities using a ratio.
		I can understand the meaning of unit pricing and constant speed.		I can explain that a ratio is a fraction which is also a division problem.
		I can solve unit rate problems using tape diagrams or double number line diagrams.		I can use tape diagrams or a double- number line diagrams to model a unit rate.
		I can explain how ratio and percent are related. I can know percents are a special		I can interpret a rate from tape diagrams and double number line diagrams.
		rate where a part is compared to a whole and the whole always has a value of 100.		I can write a ratio using letters a:b, a/b, a to b – where b is not equal to 0 according to the definition of ratio.
		I can write a percent as a rate over 100 including percents greater than 100 and less than 1.		MGSE6.RP.2 I can define and explain what a unit rate is.

	Essential Standards	Essential Standard (s) Learning Targets	Supporting Standards	Supporting Standard (s) Learning Targets
		I can represent the relationship of part to a whole to describe percents using models. I can solve problems involving finding the whole, given a part and the percent. I can convert units using multiplication and division. Convert measurement nonnegative rational		I can calculate a unit rate. I can understand rate as a ratio that compares two quantities with different units of measure. I can understand that unit rates compare two quantities with different units of measure, where the second term means "one" like 60 miles per one hour. I can interpret rate language with the @ symbol and with the words per, each, etc.
Unit: 3	MGSE6.EE.2c:	MGSE6.EE.2c:	MGSE6.EE.1	MGSE6.EE.1
Expressions	specific values for their variables. Include expressions that arise from	given values of variables using the order of operations when appropriate.	write and evaluate numerical expressions involving whole- number exponents.	I can write numbers using
Estimated Feaching	formulas in real world problems. Perform arithmetic operations,	I can evaluate expressions that arise from formulas used in	MGSE6.EE.2 Write, read, and evaluate	exponents and write numerical expressions using exponents.
20-25 days	including those involving whole number exponents, in the conventional order	real-world problems.	expressions in which letters stand for numbers.	I can calculate the value of numbers written in exponential form.
	when there are no parentheses to specify a particular order (Order of Operations).For example, use the formulas $V = s 3$		MGSE6.EE.2a Write expressions that record operations with numbers and with letters standing for	I can evaluate numerical expressions containing whole number exponents.
	and $A = 6s \ 2$ to find the volume and surface area of		numbers.	I can discover any base to the power of 0 is 1.
	a cube with sides of length $s = 1.2$		MGSE6.EE.2b Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient,	MGSE6.EE.2a I can recognize that variables represent unknown quantities.
			coefficient); view one or more	I can translate verbal expressions into numerical

Essential Standards	Essential Standard (s)	Supporting Standards	Supporting Standard (s)
	Learning Targets		Learning Targets
		parts of an expression as a single entity.	expressions and numerical expressions into verbal expressions
		entity. MGSE6.EE.3 Apply the properties of operations to generate equivalent expressions. MGSE6.EE.4 Identify when two expressions are equivalent(i.e., when the two expressions name the same number regardless of which value is substituted into them).	<ul> <li>expressions into verbal expressions</li> <li>MGSE6.EE.2b <ol> <li>I can identify the parts of an algebraic expression using mathematical terms (sum, term, product, factor, quotient, coefficient).</li> <li>I can view one or more parts of an expression as a single entity.</li> <li>I can recognize that mathematical symbols represent mathematical operations.</li> </ol> </li> <li>MGSE6.EE.3 <ol> <li>I can know what each of the following 7 Properties of Operations are: Associative, Commutative, &amp; Identity Properties of Addition &amp; Multiplication, and the Distributive Property.</li> <li>I can apply the properties of operations to generate equivalent expressions.</li> </ol> </li> </ul>
			also apply to expressions with variables.
			variables. MGSE6.EE.4 I can determine when two expressions are equivalent

	Essential Standards	Essential Standard (s) Learning Targets	Supporting Standards	Supporting Standard (s) Learning Targets
				I can use substitution to create equivalent expressions. I can combine like terms in expressions accurately.
Unit: 4 One-Step Equations and Inequalities Estimated Teaching Time: 20-25 days	MGSE6.EE.7: Solve real world 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.	<b>MGSE6.EE.7:</b> I can 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.	MGSE6.EE.5 Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true. MGSE6.EE.6 Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set. MGSE6.EE.8 Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize thatinequalities of the form $x > c$ or x < c have infinitely many solutions; represent solutions of such inequalities on number line diagrams. Represent and analyze quantitative relationships between	<ul> <li>MGSE6.EE.5 I can use precise mathematical vocabulary among expressions, equations, and inequalities. </li> <li>I can understand solution(s) are values that make the equation or inequality true &amp; they are found by using substitution. I can understand that the solution to equations is a singular value that makes the equation true and solutions to inequalities is a range of values that make the inequality true. I can use substitution as a method to reason which value(s) from a given set make the equation or inequality true. MGSE6.EE.6 I can understand variables are letters or symbols that represent unknown numbers or a specified set of numbers. I can represent real-world situations with variable expressions, identifying what the variable represents.</li></ul>

Essential Standards	Essential Standard (s)	Supporting Standards	Supporting Standard (s)
Essential Standards	Essential Standard (s) Learning Targets	Supporting Standards dependent and independent variables. MGSE6.EE.9 Use variables to represent two quantities in a real-world problem that change in relationship to one another. a. Write an equation to express one quantity, the dependent variable, in terms of the other	Supporting Standard (s)Learning TargetsMGSE6.EE.8I can discover that a variable can represent an infinite number of solutions in inequalities.I can graph inequalities on a number line.I can write inequalities to solve real-world mathematical problems.
		quantity, the independent variable. b. 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. Understand ratio concepts and use ratio reasoning to solve problems.	I can check by substitution to determine if the graph of an inequality is correct. MGSE6.EE.9 I can use variables to represent two quantities. I can identify relationships between tables, graphs, and equations.
		MGSE6.RP.3 Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations. MGSE6.RP.3a Make tables of equivalent ratios relating quantities with whole- number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.	I can recognize that a change in the independent variable creates a change in the dependent variable such as the following: As x changes, y also changes. I can write an equation to express the quantity in terms of the dependent and independent variables. <b>MGSE6.RP.3a</b> I can identify equivalent ratios.

Essential Standards	Essential Standard (s) Learning Targets	Supporting Standards	Supporting Standard (s) Learning Targets
	Learning Targets	MGSE6.RP.3b Solve unit rate problems including those involving unit pricing and constant speed. MGSE6.RP.3c Find a percent of a quantity as a rate per 100 (e.g. 30% of a quantity) means 30/100 times the quantity); given a percent, solve problems involving finding the whole given a part and the part given the whole.	Learning TargetsI can create a table using equivalent ratios.I can find missing values of a table using equivalent ratios.I can plot pairs of values on a coordinate plane.I can create and solve real-world ratio problems.MGSE6.RP.3b
		MGSE6.RP.3d Given a conversion factor, use ratio reasoning to convert measurement units within one system of measurement and between two systems of measurements (customary and metric); manipulate and transform units appropriately when multiplying or dividing quantities. For example, given 1 in. = 2.54 cm, how many centimeters are in 6 inches?	I can understand the meaning of unit pricing and constant speed. I can solve unit rate problems using tape diagrams or double number line diagrams MGSE6.RP.3c I can explain how ratio and percent are related. I can know that percents are a special rate where a part is compared to a whole and the whole always has a value of 100
			I can write a percent as a rate over 100 including percents greater than 100 and less than 1. I can represent the relationship of part to a whole to describe percents using models. I can solve problems involving finding the whole, given a part and the percent.

	Essential Standards	Essential Standard (s) Learning Targets	Supporting Standards	Supporting Standard (s) Learning Targets
				MGSE6.RP.3d
				I can convert units using
				multiplication and division.
				I can convert measurement units
				using ratio reasoning within
				customary units and within metric
				units
				units.
				I can convert measurement units
				using ratio reasoning between
				customary units and metric units.
Unit: 5	MGSE6, G.2	MGSE6.G.2	MGSE6, G.1	MGSE6, G.1
	Find the volume of a right	I can model volume by filling a	Find area of right triangles, other	I can apply the formulas to find
Area and	rectangular prism with fractional	rectangular prism with unit cubes	triangles, quadrilaterals, and	the area of various polygons
Volume	edge lengths by packing it with	of fractional lengths and use the	polygons by composing into	the area of various polygons.
( oranic	unit cubes of the appropriate unit	model to determine the volume of	rectangles or decomposing into	I can find the area of irregular
Estimated	fraction edge lengths $(1/2 u)$ , and	the prism.	triangles and other shapes; apply	polygons by composing and
Teaching	show that the volume is the same		these techniques in the context of	decomposing into rectangles and
Timor	as would be found by multiplying	I can discover that filling a prism	solving real-world and	triangles and other shapes
I me:	the edge lengths of the prism.	with cubes and counting the	mathematical problems.	thangles and other shapes.
20.25.1	Apply the formulas $V = (length) x$	number of cubes in the prism is		Lean find group of right
20-25 days	(width) x (height) and $V=$ (area of	the same as using the volume	MGSE6. G.4	r can find areas of fight,
	base) x (height) to find volumes	formula.	Represent three-dimensional	equilateral, isosceles, and scalene
	of right rectangular prisms with		figures using nets made up of	triangles, and special
	fractional edge lengths in the	I can reason that finding the	rectangles and triangles, and use	quadrilaterals.
	context of solving real-world and	volume is the same process and	the nets to find the surface area of	
	mathematical problems.	uses the same formulas if the edge	these figures. Apply these	I can model composition and
		lengths are whole units or	techniques in the context of	decomposition of shapes using
		fractional units.	solving real-world and	manipulatives.
		Loon colve real world problems	mathematical problems.	
		i can solve real-world problems		I can solve problems from the
		fractional unit		real-world using composite
		nactional unit.		figures to model real-world
				examples such as the size of a
				lake or a crater on the moon.
				MGSE6. G.4
				I can visualize how nets relate to
				three-dimensional figures.

	Essential Standards	Essential Standard (s)	Supporting Standards	Supporting Standard (s)
		Learning Targets		Learning TargetsI can understand how area of two- dimensional figures relates to surface area of three-dimensional figures.I can use nets made up of rectangles and triangles to find the surface area of three-dimensional figures. Solve real-world and mathematical problems to determine the surface area of T
Unit: 6 Statistics Estimated Teaching Time: 20-25 days	MGSE6. SP.3 Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.	MGSE6. SP. 3 I can determine the mean, median, mode, and range. I can model with examples the difference between measures of center and measures of spread. I can determine appropriate center and variation for various data sets.	MGSE6. SP.1 Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. For example, "How old am I?" is not a statistical question, but "How old are the students in my school?" is a statistical question because one anticipates variability in students' ages. MGSE6. SP.2 Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape. MGSE6. SP.4 Display numerical data in plots on a number line, including dot plots, histograms, and box plots. MGSE6.SP.5 Summarize numerical data sets in relation to their context, such as by: a. Reporting the number of observations. b. Describing the	figuresMGSE6. SP.1I can identify the differencebetween statistical andnonstatistical questions.I can formulate and write simplestatistical questions that providedifferences in responses.I can recognize that statisticalquestions generate variability.MGSE6. SP.2I can understand that datacollected to answer statisticalquestions can be analyzed by theirdistribution.I can calculate median, mode, andrange.I can describe a data set using itscenter (mean, median and mode),spread (range), and overall shape.

	Essential Standards	Essential Standard (s) Learning Targets	Supporting Standards	Supporting Standard (s) Learning Targets
				MGSE6. SP.5c
				I can use data to find the five-
				number summary and create box-
				and-whisker plot.
				I can create, read, and interpret graphical representations of numerical data.
				I can find the interguartile range
				and know that IQR is at 50% and
				not affected by outliers.
				I can identify outliers.
				I can understand how outliers
				affect the measures of central
				tendency.
				MGSE6. SP.5d
				I can identify which measure of
				center and variability best
				represents data set.
				I can relate choice of measure in
				data to the context of its
				collection.
Unit: 7	MGSE6. NS.5	MGSE6. NS. 5	MGSE6.NS.6	MGSE6.NS.6a
	Understand that positive and	I can understand that zero	Understand a rational number as a	I can use vertical and horizontal
Rational	together to describe quantities	represents a position on the	point on the number line. Extend	number lines to snow integers.
Explorations:	having opposite directions or	number fine and that every	coordinate axes familiar from	I can understand the meaning of the
Numbers and	values (e.g. temperature	negative integer is less than zero.	previous grades to represent	term opposite and plot opposites on
their	above/below zero, elevation	I can understand the meaning of	points on the line and in the plane	a number line.
Opposites	above/below sea level,	zero on a number line and in	with negative number coordinates.	
	debits/credits, positive/negative	different real-world situations.	MGSE6.NS.6a	I can reason that the opposite of the
	electric charge); use positive and		Recognize opposite signs of	opposite of the number is the
Estimated	negative numbers to represent	I can use positive and negative	numbers as indicating locations	number itself (e.g., -(-3)), and zero
1 eacning	quantities in real-world contexts,	numbers to represent quantities in	on opposite sides of 0 on the	is its own opposite.
l'ime:			number line; recognize that the	

	Essential Standards	Essential Standard (s) Learning Targets	Supporting Standards	Supporting Standard (s) Learning Targets
15-20 days	explaining the meaning of 0 in each situation.	the real world (ex. temperatures above and below zero). I can represent real world scenarios using integers (bank accounts, temperature, and sea level).	opposite of the opposite of a number is the number itself, e.g., -(-3) = 3, and that 0 is its own opposite. <b>MGSE6.NS.6b</b> Understand signs of number in ordered pairs as indicating	I can describe quantities having opposite value. <b>MGSE6.NS.6b</b> I can understand that the signs of numbers in ordered pairs represents a singular location on the coordinate plane.
			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.	I can understand that an ordered pair is composed of two parts: The first coordinate refers to the x-axis, and the second coordinate refers to the y-axis.
			MGSE6.NS.6c Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational	I can recognize the signs of all ordered pairs on the coordinate plane: Quadrant I (+, +); Quadrant II (-, +); Quadrant III (-, -); Quadrant IV (+, -).
			numbers on a coordinate plane. MGSE6.NS.7 Understand ordering and absolute value of rational numbers.	I can discover that changing the sign of one or both numbers in the ordered pair will create a reflection of the point.
			MGSE6NS.7a Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram.	MGSE6.NS.6c I can plot coordinates in all four quadrants of a coordinate plane.
			MGSE6.NS.7b Write, interpret, and explain statements of order for rational numbers in real-world contexts.	I can plot integers and other rational numbers on a number line (vertically and horizontally) and on a coordinate plane.
			MGSE6.NS.7c Understand the absolute value of a rational number as its distance from 0 on the number line;	I can find the position of integer pairs and other rational numbers (including fractions and decimals)

Essential Standards	Essential Standard (s) Learning Targets	Supporting Standards	Supporting Standard (s) Learning Targets
Essential Standards	Essential Standard (s) Learning Targets	Supporting Standards interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. MGSE6.NS.7d Distinguish comparisons of absolute value from statements about order. MGSE6.NS.8 Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate. MGSE6.G.3 Draw polygons in the coordinate plane given coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply those techniques in the context of solving real-world mathematical problems.	Supporting Standard (s)         Learning Targets         on a coordinate plane.         MGSE6NS.7a         I can order rational numbers on a number line.         I can compare rational numbers using inequality symbols and justify the inequality symbol used.         I can order rational numbers on a number line.         I can compare integers using inequality symbols and justify the inequality symbols and justify the inequality symbols and justify the inequality symbol used.         MGSE6NS.7b         I can write an inequality to show the relationship between rational numbers in real-world situations.         I can explain statements of order for rational numbers in real-world situations.         I can define, identify and understand absolute value as the distance from zero on the number line.         I can recognize the symbol     as representing absolute value.         I can use absolute value to represent the size, amount, distance, or magnitude in real-
			I can model absolute value with number lines.

Essential Standards	Essential Standard (s)	Supporting Standards	Supporting Standard (s)
	Learning Targets		Learning Targets
			MGSE6NS.7d
			I can explain that as the value of a
			negative, rational number
			decreases, its absolute value
			(distance from zero) increases.
			I can develop understanding of
			absolute values within real-world
			contexts
			contexts.
			MGSE6NS.8
			I can graph points in all four
			quadrants of the coordinate plane.
			I can solve real-world
			mathematical problems by
			graphing points in all four
			quadrants of a plane (maps, shapes,
			pictures).
			I can understand that a line
			segment from one coordinate pair
			to another represents a distance.
			······································
			I can understand that if two
			coordinates have the same x- or y-
			value, they are on the same line.
			I can understand that the distance
			from a point on a coordinate plane
			to an axis is an absolute value
			to un unis is un absolute value.
			I can use the coordinate plane to
			represent real-world scenarios
			such as streets of a map.
			and a second of a map.
			I can model solutions to real-world
			problems on a coordinate plane
			r
			MGSE6. G.3

	Essential Standards	Essential Standard (s)	Supporting Standards	Supporting Standard (s)
		Learning Targets		Learning Targets
				I can draw polygons on a coordinate plane given coordinates for the vertices.
				I can discover how to find the length of sides of polygons using the coordinates of the vertices having the same first or second coordinate and generalize a technique that will always work.
				I can determine the length of the sides of polygons, by counting, in a coordinate plane given the same first or second coordinate.
Unit: 8	All			
Show What We Know				
Estimated Teaching Time:				
15-20 days				