Grade: _	K	Subject Area:Mathematics		Quarter:	_1_
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Counting & Cardinality	Cluster 1	1.1 Count to 100 by ones and by tens.			
MAFS.K.CC.1.1 MAFS.K.CC.1.2		1.2 Count forward in known range beginning from any number.			
MAFS.K.CC.1.3		1.3 Read numerals from 0 to 20.			
		1.3 Write numerals from 0 to 20.			
		1.3 Write a stated number 0 to 20 when given verbal name.			
		1.3 Represent number of objects with a written numeral 0 to 20.			
MAFS.K.CC.2.4 MAFS.K.CC.2.5	Cluster 2	2.4 Count objects accurately by saying one number name for each object in standard order.			
		2.4 Pair an object(s) with the corresponding number name.			
		2.4 Pair a number name with the corresponding number of objects.			
		2.4 Write the number of objects that have been counted.			
		2.4 Given a row or group of objects and the number, write the number that has one more.			
		2.4 Count the number for up to 10 objects in any configuration.			
		2.5 Write the number for up to 20 objects in a circle, line, and array.			
		2.5 Write the number for up to 20 objects in a scattered configuration			
MAFS.K.CC.3.6 MAFS.K.CC.3.7	Cluster 3	3.6 Identify if the number of objects in a group are greater than, less than and/or equal to the number of objects in another group.			
		3.6 Compare two groups of up to 10 objects by one-to-one matching.			
		3.6 Compare two groups of up to 10 objects by counting.			
		3.7 Compare two numbers between 1 and 10 presented as written numerals.			

Grade:K		Subject Area:Mathematics	Quarter:2			
Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference	
Operations and Algebraic Thinking MAFS.K.OA.1.1 MAFS.K.OA.1.2 MAFS.K.OA.1.4 MAFS.K.OA.1.5	Cluster 1	 1.1 Represent addition and subtraction with objects, fingers, claps. 1.1 Represent addition and subtraction with drawings. 1.1 Represent addition and subtraction with expressions and equations. 1.1 Represent addition and subtraction with mental images. 1.1 Represent addition and subtraction with verbal explanations. 1.1 Represent addition and subtraction by acting out situations. 1.2 Solve addition and subtraction word problems. 1.2 Add within 10 by using objects or drawings. 1.4 Decompose numbers to 10 into pairs in more than one way. 1.4 Find missing addends to make 10 by using objects or drawings. 				

Grade:K		Subject Area:Mathematics	Quarter:3		
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Operations and Algebraic Thinking	Cluster 1	1.1.a Solve word problems using objects and drawings to represent the problem.			
MAFS.K.OA.1.1a		1.1.a Solve word problems using equations with symbols for the unknown numbers to represent the problem.			
Number & Operations in Base Ten	Cluster 1	1.1 Combine a group of 10 objects with a group of up to 9 objects and write the number sentence.			
MAFS.K.NBT.1.1		1.1 Separate a group of 11 to 19 objects into 10 and ones, and write the number sentence.			
		1.1 Write the missing number in a sentence that represents composition or decomposition of 11 to 19. (i.e. 10 + = 14)			
Geometry	Cluster 1	1.1 Identify squares, circles, triangles, rectangles, and hexagons.			
MAFS.K.G.1.1 MAFS.K.G.1.2		1.1 Identify cubes, cones, cylinders, and spheres.			
MAFS.K.G.1.3		1.1 Describe relative positions of shapes using terms such as above, below, beside, in front of, behind, and next to.			
		1.2 Understand that a shape can have any orientation or size.			
		1.3 Identify shapes as flat or solid.			

Grade: _	K	Subject Area:Mathematics		Quarter: _	_4
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Measurement & Data MAFS.K.MD.1.1 MAFS.K.MD.1.2 MAFS.K.MD.1.a	Cluster 1	 1.1 Describe measurable attributes of objects, such as length or weight. 1.1. Describe several measurable attributes of a single object. 1.2 Directly compare objects to see which is taller/shorter. 1.2 Directly compare objects to see which is longer/shorter. 1.2 Directly compare objects to see which is heavier/lighter. 1.2 Directly compare objects to see which is heavier/lighter. 1.4 Use smaller objects to measure an item from end to end. 1.5 Directive the length of an object as a whole number of length units. 1.6 Demonstrate that the length measurement of an object is the number of same size length units that span it with no gaps or overlaps to express length. 			
Measurement & Data MAFS.K.MD.2.3	Cluster 2	 2.3 Given a group of mixed objects, classify objects into given categories. 2.3 For a group of mixed objects, count and sort objects in a given category. 2.3 Tell which category has the most/least objects. 			
Geometry MAFS.K.G.2.4 MAFS.K.G.2.5 MAFS.K.G.2.6	Cluster 2	 2.4 Analyze and compare two-dimensional shapes. 2.4 Analyze and compare three-dimensional shapes. 2.4 Describe similarities, differences, parts, number of sides and other attributes of two-dimensional and three-dimensional shapes. 2.5 Build models of two-dimensional (flat) shape using any material. 2.5 Draw two-dimensional (flat) shapes. 2.5 Build simple models of three-dimensional (solid) shapes. 2.6 Combine simple shapes to form a larger or different shape. 			

Grade: 1		Subject Area:Mathematics		Quarter:1_	_
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Operations and Algebraic Thinking MAFS.1.OA.1.1	Cluster 1	1.1 Add and subtract within 20 to solve word problems about combining or separating. 1.1 Add and subtract within 20 to solve word problems about comparing.			
MAFS.1.OA.2.3 MAFS.1.OA.2.4	Cluster 2	 1.1 Use objects or drawings to represent word problems. 2.3 demonstrate and explain that adding zero to any number does not change the number. 2.3 demonstrate and explain that when adding numbers in any order, the sum does not change. 			
MAFS.1.OA.3.5	Cluster 3	 2.3 demonstrate and explain how to group two of three addends (when adding three numbers) to create a friendly number making addition easier. 2.4 Relate subtraction to finding a missing addend. 2.4 Understand subtraction as an unknown-addend problem. 3.5 Add by counting all, counting on, and recognizing + 1 means the next number and + 2 means the number that is two numbers after in the counting sequence. 3.5 Subtract by counting back, counting up from, and recognizing (- 1) means the number before, and (- 2) means the number that is two numbers before in the counting sequence. 3.5 Identify, describe and use mathematical patterns of adding or subtracting any number up to 20. 			

MAFS.1.OA.4.7 MAFS.1.OA.4.8	Cluster 4	 4.7 Explain that the equal sign means "is the same value as" or "balances". 4.7 Compare the quantities of both sides of an equation and determine whether the equation is true or false. 4.7 Solve addition and subtraction equations where the unknown number is represented by a symbol, such as a box or question mark. 4.7 Determine the unknown value in an addition or subtraction equation when two of three numbers in the equation are given. 		
Number and Operations in Base Ten MAFS.1.NBT.1.1	Cluster 1	1.1 Count to 120, starting at any number less than 120. 1.1 Read and write numbers to 120.		
		1.1 Represent a number of objects to 120 with a written numeral.		

Grade: <u>1</u>		Subject Area: <u>Mathematics</u>	Quarter: <u>2</u>			
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference	
Operations and Algebraic Thinking	Cluster 1	1.2 Add three whole numbers whose sum is less than or equal to 20.				
MAFS.1.OA.1.2		 1.2 Solve word problems that call for the addition of three whole numbers whose sum is less than or equal to 20, using objects, drawings, and equations. 1.2 Solve addition word problems involving three whole numbers with an unknown number in different positions 1.2 Solve addition word problems with a symbol representing 				
MAFS.1.OA.2.4	Cluster 2	the unknown number. 2.4 Show and explain how a subtraction equation can be rewritten as a related addition equation with an unknown numeral.				
		 2.4 Demonstrate the relationship between addition and subtraction using a variety of strategies and tools as a missing addends. 2.4 Use strategies (e.g., doubles, doubles plus one, doubles minus one, friendly numbers, known facts) to add 20. 				
MAFS.1.OA.3.6	Cluster 3	 3.6 Use strategies to add and subtract within 20. 3.6 Use mathematical tools such as ten frames, part-part whole, and number lines to model addition and subtraction within 20. 3.6 Explain strategies used to add and subtract within 20. 				
		3.6 Add and subtract within 10 with fluency.				

Number and Operations in Base Ten	Cluster 2	2.2 Understand that the two digits of a two-digit number represent amounts of tens and ones.		
MAFS.1.NBT.2.2 MAFS.1.NBT.2.3		2.2 Understand how to represent numbers from 11 to 19 as a 10 and ones.		
		2.2 Understand that 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to tens with no ones.		
		2.3 Compare numbers to 20 using the symbols >, =, and <.		
		2.3 Compare two 2-digit numbers using the symbols >,=, and <.		

Grade: <u>1</u>		Subject Area: <u>Mathematics</u>		Quarter: <u>3</u>	
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Strand/ Domain Number and Operations in Base Ten MAFS.1.NBT.3.4 MAFS.1.NBT.3.5 MAFS.1.NBT.3.6	Cluster 3	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies 3.4 Add within 100 using models or drawings. 3.4 Add a two-digit number and a multiple of ten, within 100, using appropriate tools (e.g., concrete models and drawings) and strategies. 3.4 Add a two-digit number to a one-digit number, within 100. 3.4 Add a two-digit number and a multiple of ten. 3.4 Add a two-digit number and a multiple of ten. 3.4 Add a two-digit number and a multiple of ten. 3.4 Explain and record the steps that were followed when using concrete models and drawings. 3.5 Add a two-digit number and a one-digit number. 3.5 Count forward and backward by tens starting at any number within 100 on a hundreds chart. 3.5 Identify the pattern that occurs when counting by tens.	Formative Assessment	Summative Assessment	Text Reference
		 3.5 Identify 10 more or 10 less than any number within 100. 3.5 Use mental math strategies to add ten to a two-digit number. 3.5 Use mental math strategies to subtract ten from a two-digit number. 3.5 Explain mental math strategies used to find 10 more or 10 less than any two-digit number. 3.5 Explain why the tens digit increases or decreases by one when 10 is added or subtracted. 3.6 Subtract a multiple of ten from multiples of ten. 3.6 Explain the pattern of subtracting a multiple of ten from multiples of ten (i.e., only the tens digit changes) to aid in efficiency and fluency. 			

Grade : <u>1</u>		Subject Area: <u>Mathematics</u>		Quarter: <u>4</u>	_
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Measurement and Data	Cluster 1	1.1 Order three objects by length.			
MAFS.1.MD.1.1 MAFS.1.MD.1A		1.1 Compare the lengths of two objects indirectly by using a third object.			
		1.a. Repeat a short object end-to-end to measure a longer object.			
		1.a. When measuring, know that there cannot be gaps or overlaps.			
		1.a. Recognize that the ruler is a tool used to measure the attributes of length.			
		1.a. Discuss the importance of the zero and end point.			
		1.a.Explain that length measure is the span between two points.			
		1.a. Recognize and explain a ruler has equal length intervals with no gaps or overlaps.			
		1.a.Use a ruler to measure to the nearest inch.			
MAFS.1.MD.2.3 MAFS.1.MD.2a	Cluster 2	2.3 Tell and write time in hours using analog clocks.			
		2.3 Tell and write time in half-hours			
MAFS.1.MD.3.4	Cluster 3	3.4 Sort and represent up to three categories of data, (use objects such as food, students, Post-It Notes, stuffed animals, tally marks).			
		3.4 Answer questions about the total number of data points and how many data points are in each category.			
		3.4 Determine when a category has more or less than another category.			

Geometry	Cluster 3	1.1 Sort shapes by a defining attribute such as the number of		
		sides.		
MAFS.1.G.1.1		1.1 Drow change with a given defining attribute		
MAFS.1.G.1.2 MΔFS.1.G.1.3				
M/ (1 0.1.0.1.0		1.2 Combine two-dimensional shapes (rectangles, squares,		
		trapezoids, triangles, half-circles, and quarter-circles) to create a		
		composite shape.		
		1.2 Combine three dimensional aboves (subservice) with restance lar		
		1.2 Combine three-dimensional shapes (cubes, nght rectangular		
		composite shape.		
		1.3 Partition two-dimensional shapes into equal shares.		
		1.3 Describe the shares using words fraction words.		
		1.3 Describe the whole as two of four of		
		1.3 Demonstrate decomposing into equal shares creates		
		smaller shares.		

Grade: _	2	Subject Area:Mathematics	Quarter:1_		
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Operations and Algebraic Thinking	Cluster 2	1.1 Add and subtract within 100 to solve one- and two-step word problems about adding to, taking from, putting together, or taking apart.			
MAFS.2.OA.2.2 MAFS.2.OA.3.3	Cluster 3	1.1 Add and subtract within 100 to solve one- and two-step word problems about comparing.			
		2.2 Fluently add and subtract within 20 using mental strategies.			
		2.2 Know from memory all sums of two one-digit numbers.			
		3.3 Determine if a group of up to 20 objects is even or odd.			
		3.3 Express an even number as a sum of two equal addends.			
Number and Operations in Base Ten MAFS.2.NBT.1.1 MAFS.2.NBT.1.2 MAFS.2.NBT.1.3 MAFS.2.NBT.1.4	Cluster 1	 1.1 Understand that a three-digit number represents hundreds, tens, and ones. 1.1 Understand that a hundred is 10 tens. 1.1 Understand that 100, 200, and so on refer to hundreds with 0 tens and 0 ones. 			
MAFS.2.NBT.2.8 MAFS.2.NBT.2.9	Cluster 2	 2.5 Fluently add within 100 using various strategies. 2.5 Fluently subtract within 100 using various strategies. 2.6 Add up to four 2-digit numbers using various strategies. 2.8 Mentally add or subtract 10 or 100 to any given number 100-900. 2.9 Explain why addition and subtraction strategies work using place value. 2.9 Explain why addition and addition and subtraction strategies work using properties of operations. 			

Grade: _	_2	Subject Area:Mathematics		Quarter:	_2_
Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Operations and Algebraic Thinking MAFS.2.OA.1.1 MAFS.2.OA.1.a	Cluster 1	 1.1 Use objects, equations, or drawings to represent word problems. 1.a Find an unknown whole number in an equation by relating 4 or more whole numbers. 			
Number and Operations in Base Ten MAFS.2.NBT.2.5 MAFS.2.NBT.2.6 MAFS.2.NBT.2.7	Cluster 2	 1.2 Count by 5s, 10s, and 100s within 1000. 1.3 Read and write numbers to 1000 using base-ten numerals. 1.3 Read and write numbers to 1000 using number names. 1.3 Read and write numbers to 1000 in expanded form. 1.4 Compare two 3-digit numbers using the symbols >, =, and <. 2.7 Add within 1000 using models or drawings. 2.7 Add within 1000 using place value strategies. 2.7 Subtract within 1000 using models or drawings. 2.7 Subtract within 1000 using properties of operations. 2.7 Subtract within 1000 using place value strategies. 2.7 Subtract within 1000 using place value strategies. 2.7 Subtract within 1000 using place value strategies. 2.7 Subtract within 1000 using properties of operations. 			

Grade: _	2	Subject Area:Mathematics		Quarter: _	_3
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Measurement and Data MAFS.2.MD.1.1 MAFS.2.MD.1.2 MAFS.2.MD.1.3 MAFS.2.MD.1.4 MAFS.2.MD.2.5 MAFS.2.MD.2.6 MAFS.2.MD.3.7 MAFS.2.MD.3.8	Cluster 1 Cluster 2 Cluster 3	 1.1 Measure the length of an object in inches, feet, centimeters, and meters. 1.1 Select and use the appropriate tool to measure an object (rulers, yardstick, meter stick, measuring tapes). 1.2 Measure an object with two units and relate the measurements to the unit size. 1.3 Estimate lengths in inches, feet, yards, centimeters, and meters. 1.4 Measure to find out how much longer one object is than another. 1.4 Express the length difference between two objects in terms of a standard unit length. 2.5 Use addition and subtraction within 100 to solve word problems involving lengths with the same units. 2.5 Use drawings and equations to represent lengths. 2.6 Represent whole number sums and differences as lengths within 100 on a number line diagram. 3.7 Tell and write time to the nearest five minutes from analog clocks. 3.7 Tell and write time to the nearest five minutes from digital clocks. 3.7 Write times using a.m. and p.m. 3.8 Solve word problems involving dollar bills and coins, using \$ and ¢ symbols. 3.8 Compute the value of any combinations of coins within one dollar. 3.8 Relate the value of coins to other coins and to the dollar. 			

Grade:	_2	Subject Area:Mathematics		Quarter:	4
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Operations and Algebraic Thinking MAFS.2.OA.3.4	Cluster 3	 3.4 Add to find the number shown by an array with up to 5 rows and 5 columns. 3.4 Write an equation for an array as a sum of equal addends. 			
Measurement and Data MAFS.2.MD.4.9 MAFS.2.MD.4.10	Cluster 4	 4.9 Make a line plot of measurement data, measured to nearest whole unit. 4.9 Measure lengths of several objects to the nearest whole unit. 4.9 Make repeated measurements of the same object. 4.9 Show measurements by making a line plot with whole number units. 4.10 Draw a bar graph with up to four categories. 4.10 Draw a picture graph with up to four categories. 4.10 Add or subtract to solve problems about data presented in a bar graph. 			
Geometry MAFS.2.G.1.1 MAFS.2.G.1.2 MAFS.2.G.1.3	Cluster 1	 1.1 Recognize and draw shapes having a given number of angles or faces. 1.1 Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. 1.2 Partition a rectangle into rows and columns of squares and count the squares. 1.3 Partition circles and rectangles into two, three, or four equal shares. 1.3 Describe shares using the words halves, thirds, half of, a third of, etc. 1.3 Describe the whole as two halves, three thirds, four fourths. 1.3 Recognize that equal shares of identical wholes need not have the same shape. 			

Grade:	3	Subject Area:Mathematics	i	Quarter:1	
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Number and Operations in Base Ten MAFS.3.NBT.1.1 MAFS.3.NBT.1.2	Cluster 1	 1.1 Round numbers to the nearest 10 or 100. 1.1 Fluently add numbers with sums to 1000. 1.1 Fluently subtract from numbers to 1000. 1.2 Subtract by relating to addition. 			
Operations and Algebraic Thinking MAFS.3.OA.4.8	Cluster 4	4.8 Represent and solve two-step word problems using addition and/or subtraction.			

Grade:	3	Subject Area:Mathematics		Quarter:	2
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Operations and Algebraic Thinking	Cluster 1	1.1 Interpret multiplication as the total of equal groups.			
MAFS.3.0A.1.1 MAFS.3.0A.1.2 MAFS.3.0A.1.3 MAFS.3.0A.1.4		 1.2 Interpret division as sharing equally or making equal shares. 1.3 Use multiplication and division to solve word problems. 			
		1.4 Find the missing number in a multiplication or division equation.			
MAFS.3.0A.2.5 MAFS.3.0A.2.6	Cluster 2	2.5 Apply the commutative and associative properties for multiplication.			
		2.5 Apply the distributive property when learning basicfacts.			
		2.6 Relate division to finding a missing factor.			
MAFS.3.0A.3.7	Cluster 3	3.7 Fluently multiply to find products of two one-digit numbers.			
		3.7 Fluently divide numbers to 100 by one-digit numbers.			

Operations and Algebraic Thinking	Cluster 4	 4.8 Represent and solve two-step word problems using addition and/or subtraction. 4.8 Represent and solve two-step word problems 		
MAFS.3.0A.4.8 MAFS.3.0A.4.9		using multiplication and/or division4.8 Represent and solve two-step word problems using any two operations4.9 Identify and explain arithmetic patterns.		
Numbers and Base Ten	Cluster 1	1.3 Multiply one-digit numbers by multiples of 10 up to 90.		
MAFS.3.NBT.1.3				

Grade:	_3	Subject Area:	_Mathematics	Quarter: _	_3
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Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Measurement and Data	Cluster 2	2.3 Draw a bar graph using an appropriate scale.			
MAFS.3.MD.2.3		2.3 Solve problems using information from graphs.			
Geometry MAFS.3.G.1.1 MAFS.3.G.1.2	Cluster 1	 1.1 Categorize quadrilaterals including rhombuses, rectangles, and squares by their attributes. 1.2 Partition shapes into parts with equal areas to 			
		represent unit fractions.			
Measurement and Data	Cluster 3	3.5 Understand that area is measured in square units.			
MAFS.3.MD.3.5 MAFS.3.MD.3.6 MAFS.3.MD.3.7		3.5 Count unit squares to measure area.			
W/ 1 0.0.WD.0./		3.6 Relate area of a rectangle to multiplication.			
		3.6 Solve real-world problems involving area.			
		3.6 Represent products as rectangular areas.			
		3.7 Use area models to represent the distributive prop.			
		3.7 Find areas by decomposing figures to make rectangles.			
		4.8 Find the perimeter of a polygon.			
MAFS.3.MD.4.8	Cluster 4	4.8 Find an unknown side length in a polygon.			
		 4.8 Compare perimeters of tworectangles with the same area. 4.8 Compare areas of two rectangles with the same perimeter. 			

Grade: 3		Subject Area:Mathematics		Quarter:4		
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference	
Number and Operations – Fractions MAFS.3.NF.1.1 MAFS.3.NF.1.2 MAFS.3.NF.1.3	Cluster 1	 1.1 Write a fraction to represent one or more equal parts of a whole unit. 1.2 Write fractions to represent lengths of intervals on a number line. 1.2 Write fractions to represent locations on a number line. 1.3 Recognize that equivalent fractions are the same size. 1.3 Recognize and generate simple equivalent fractions. 1.3 Recognize fractions equivalent to whole numbers. 1.3 Compare two fractions with the same numerator or denominator. 				

Measurement and Data	Cluster 1	1.1 Write time to the nearest minute.		
MAFS.3.MD.1.1 MAFS.3.MD.1.2		1.1 Measure time intervals in minutes.		
		1.1 Solve word problems involving time intervals.		
		1.1 Measure and estimate liquid volume inliters.		
		1.2 Measure and estimate liquid volume inliters.		
		1.2 Solve word problems involving liquid volume.		
		1.2 Measure and estimate mass in grams and kilograms.		
		1.2 Solve word problems involving mass.		
		1.2 Make line plots of data measured using rulers to 1/4 inch.		

• Review value of money

The standards listed below should be incorporated into the Science & Social Studies

Reading a Thermometer in Celsius and Fahrenheit

MAFS.3.MD.2.3 Draw a bar graph using an appropriate scale.

Solve problems using information from graphs.

	Subject AreaMathematics	Quarter:1		
Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Cluster 2	2.4 List factors pairs for numbers 1 to 100.			
	2.4 Recognize factors and multiples.			
Cluster 3	3.5 Complete number patterns.			
	3.5 Generate number or shape patterns from rules.			
	3.5 Identify and explain features of patterns.			
Cluster 1	 1.1 Relate place value to multiplication and division by 10. 1.2 Read and write numbers to 1 million. 1.2 Convert between standard and expanded forms of whole numbers. 1.2 Compare whole numbers up to 1 million. 			
Cluster 2	 1.3 Round multi-digit whole numbers to any place. 2.4 Add multi-digit numbers using the standard algorithm. 2.4 Subtract multi-digit number using the standard algorithm. 2.5 Multiply 2-digit by 1-digit numbers using place value and/or models. 2.5 Multiply 3- and 4-digit by 1-digit numbers using place value value and/or models. 			
	Cluster 2 Cluster 3 Cluster 1 Cluster 2	Subject Area Mathematics Cluster Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies Cluster 2 2.4 List factors pairs for numbers 1 to 100. 2.4 Recognize factors and multiples. 2.4 Recognize factors and multiples. 2.4 Recognize prime and composite numbers.	Subject Area Mathematics Cluster Standards-based Essential Skills/ Concepts to be Targeted & Formative Assessment Cluster 2 2.4 List factors pairs for numbers 1 to 100. 2.4 Recognize factors and multiples. 2.4 Recognize prime and composite numbers. Cluster 3 3.5 Complete number patterns. 3.5 Generate number or shape patterns from rules. 3.5 Identify and explain features of patterns. Cluster 1 1.1 Relate place value to multiplication and division by 10. 1.2 Convert between standard and expanded forms of whole numbers. 1.2 Compare whole numbers up to 1 million. 1.2 Compare whole numbers using the standard algorithm. 2.4 Subtract multi-digit numbers using the standard algorithm. 2.4 Subtract multi-digit put-digit numbers using place value and/or models.	Subject AreaMathematics

Grade: <u>4</u>		Subject Area <u>Mathematics</u>		Quarter: <u>2</u>	
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Number and Operations in Base Ten MAFS.4.NBT.2.6	Cluster 2	 2.5 Multiply 2-digit by 2-digit numbers using place value and/or models. 2.6 Relate division and multiplication. 2.6 Divide 2-,3- and 4-digit dividends by 1-digit divisors without remainders using place value and/or models. 2.6 Divide 2-,3- and 4-digit dividends by 1-digit divisors with remainders using place value and/or models. 			
Measurement and Data MAFS.4.MD.1.3	Cluster 1	 1.3 Solve problems involving area of rectangles. 1.3 Solve problems involving perimeter of rectangles. 			
Operations and Algebraic Thinking MAFS.4.OA.1.1 MAFS.4.OA.1.1a MAFS.4.OA.1.1b MAFS.4.OA.1.2 MAFS.4.OA.1.3	Cluster 1	 1.1 Interpret multiplication as "times as many." 1.1 Determine whether an equation is true or false using comparative thinking. 1.2 Distinguish multiplicative from additive comparison in word problems. 1.3 Solve multi-step word problems using number sentences. 1.3 Interpret remainders in division problems. 1.3 Estimate to assess reasonableness of answers. 			

Grade:4		Subject AreaMath		Quarter: 3	_
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Number and Operations Fractions MAFS.4.NF.1.1 MAFS.4.NF.1.2	Cluster 1	 1.1 Identify equivalent fractions using models. 1.1 Write fractions equivalent to a given fraction. 1.2 Compare fractions by rewriting them with a common denominator. 1.2 Compare fractions by using models. 			
MAFS.4.NF.2.3 MAFS.4.NF.2.4	Cluster 2	 1.2 Compare fractions by comparing to benchmarks. 2.3 Decompose fractions and mixed numbers, and write as equations. 2.3 Add and subtract fractions with like denominators. 2.3 Add and subtract mixed numbers with like denominators. 			
MAFS.4.NF.3.5 MAFS.4.NF.3.6 MAFS.4.NF.3.7	Cluster 3	 2.3 Add and subtract fractions to solve word problems. 2.4 Decompose a non-unit fraction as a whole number times a unit fraction. 2.4 Multiply fractions by whole numbers. 3.5 Express fractions in tenths as hundredths. 3.5 Add fractions in tenths and hundredths. 3.6 Convert between decimals and fractions in tenths or hundredths. 3.6 Locate decimals on a number line. 3.7 Compare two decimals to hundredths. 			

Measurement and Data MAFS.4.MD.1.1 MAFS.4.MD.1.2	Cluster 1	1.1 Compare measurement units and convert from larger to smallerunits.		
		1.1 Create or complete tables of equivalent measurements.		
		1.2 Solve problems involving distance, time, and elapsed time.		
		1.2 Solve problems involving money.		
		1.2 Solve problems involving capacity (liquid volume) and weight (mass).		
		1.2 Represent measurements on number line diagrams.		

The standards listed below should be incorporated into the Science & Social Studies

Solve problems using information from graphs.

Make line plots using data including fractions.

Solve problems involving data shown on a line plot.

Solve problems involving distance, time, and elapsed time.

Grade:4		Subject AreaMath		Quarter:4	
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Number and Operations Fractions MAFS.4.NF.3.6 MAFS.4.NF.3.7	Cluster 3	 3.6 Convert between decimals and fractions in tenths or hundredths. 3.6 Locate decimals on a number line. 3.7 Compare two decimals to hundredths. 			
Geometry MAFS.4.G.1.1 MAFS.4.G.1.2 MAFS.4.G.1.3	Cluster 1	 1.1 Identify and draw points, lines, and line segments. 1.1 Identify and draw parallel and perpendicular lines. 1.1 Identify and draw rays and acute, right, and obtuse angles. 1.2 .Classify and identify two-dimensional figures by sides and triangles by angles. 1.3 Identify and draw lines of symmetry. 			
Measurement and Data MAFS.4.MD.2.4 MAFS.4.MD.3.5 MAFS.4.MD.3.6 MAFS.4.MD.3.7	Cluster 2 Cluster 3	 2.4 Make line plots using data including fractions. 2.4 Solve problems involving data shown on a line plot. 3.5 Relate degrees to fractions of a circle. 3.6 Measure and draw angles using a protractor. 3.7 Solve problems involving angle measurements. 			

Grade: _5		Subject AreaMath		Quarter: 1	
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Number and Operations in Base Ten MAFS.5.5.NBT.1.1 MAFS.5.5.NBT.1.2 MAFS.5.5.NBT.1.3 MAFS.5.5.NBT.1.4	Cluster 1	 1.1 Relate place value to multiplying by 10 or 1/10. 1.2 Multiply and divide whole numbers by powers of 10. 1.2 Write powers of 10 using exponents. 1.3 Read and write decimals to thousandths. 1.3 Convert between standard and expanded form of decimals. 1.3 Compare decimals to thousandths. 1.4 Round decimals to any place. 			
MAFS.5.5.NBT.2.5 MAFS.5.5.NBT.2.6 MAFS.5.5.NBT.2.7	Cluster 2	 2.5 Multiply whole numbers up to 4-digit by 1 digit using the standard algorithm. 2.5 Multiply whole numbers up to 2-digit by 2-digit using the standard algorithm. 2.6 Relate division to multiplication by multiples of 10. 2.6 Divide 3-digit dividends by multiples of 10 using place value and/or models. 2.6 Relate division to multiplication by 2- digit factors. 2.6 Relate division to multiplication by 2- digit factors. 2.7 Relate addition and subtraction of decimals. 2.7 Add and subtract decimals to hundredthsusing 			

place value and/or models.		

Grade: _5		Subject AreaMath	C	luarter:2	
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	e Formative Assessment	Summative Assessment	Text Reference
Number and Operations in Base Ten	Cluster 1	1.2 Multiply and divide decimals by powers of 10.			
MAFS.5.5.NBT.1.2	Cluster 2	2.7 Relate multiplication and division of decimals.			
MAFS.5.5.NBT.2.7		2.7 Multiply and divide decimals to hundredths using place value and/or models.			
Geometry MAFS.5.G.1.1 MAFS.5.G.1.2	Cluster 1	 1.1 Graph and identify points with positive coordinates on a coordinate system. 1.2 Use coordinates (positive only) to represen and solve problems. 	t		
MAFS.5.G.2.3 MAFS.5.G.2.4	Cluster 2	1.2 Use coordinates to analyze geometric shap 2.3 Classify and identify quadrilaterals.	Des.		
		2 .4 Recognize categories and create hierarchies ofshapes.			

Grade: _5		Subject AreaMath	Q	uarter:3	
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Number and Operations-Fractions	Cluster 2	2.3 Interpret fractions as division to solve word problems.			
MAFS.5.NF.2.3 MAFS.5.NF.2.4		2.4 Multiply whole numbers by fractions.			
MAFS.5.NF.2.5 MAFS.5.NF.2.6 MAFS.5.NF.2.7		2.4 Represent multiplications of fractions using area models.			
		2.4 Multiply fractions by fractions.			
		2.5 Interpret multiplication as resizing.			
		2.6 Multiply fractions and mixed numbers to solve word problems.			
		2.6 Divide unit fractions by whole numbers using models.			
		2.6 Divide whole numbers by unit fractions using models.			
		2.7 Relate division to multiplication of fractions.			
		2.7 Divide with unit fractions and whole numbers to solve problems.			

Note:

Data Analysis, Probability, & Statistics NOT INCLUDED IN MAFS: apply probability concepts and counting rules; understand and apply measures of central tendency and variability; interpret data and make predictions (can be incorporated in science)

Geometry taught in Q4: identify, classify, and compare geometric figures; apply concepts of perimeter, area and volume; describe geometric properties, patterns, and relationships; estimate geometric measurements

Measurement taught in Q4: estimate measurements with appropriate precision; measure length, distance, time, temperature, weight, mass, and volume; identify and use appropriate units of measurement and measurement tools. (can be incorporated in science)

Grade: _5		Subject AreaMath	Quarter: _4_		
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Operations and Algebraic Thinking	Cluster 1	1.1 Evaluate numerical expressions with parentheses.			
MAFS.5.OA.1.1 MAFS.5.OA.1.2		1.2 Write and interpret numerical expressions.			
MAFS.5.OA.2.3	Cluster 2	2.3 Write and compare two patterns given two rules.			
		2.3 Identify features of related patterns in tables or graphs.			
Measurement and Data	Cluster 1	1.1 Convert metric measurements.			
MAFS.5.MD.1.1		1.1 Convert conventional measurements.			
MAFS.5.MD.2.2	Cluster 2	2.2 Make line plots using data including fractions.			
		2.2 Solve problems about line plots.			
MAFS.5.MD.3.3	Cluster 3	3.3 Identify a cube as a unit of volume.			
		3.4 Measure volume by counting unit cubes.			
		3.5 Add and/or multiply to find volumes of rectangular prisms.			
		3.5 Solve problems involving volume of rectangular prisms (whole numbers lengths).			
		3.5 Solve problems involving volumes of connected prisms.			

Grade: _6		Subject AreaMath	Quarter	:_1_	
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
The Number System	Cluster 1	1.1 Relate division and multiplication of fractions.			
MAFS.6.NS.1.1		1.1 Divide fractions by fractions using models.			
		1.1 Divide fractions by fractions to solve problems.			
MAFS.6.NS.2.2	Cluster 2	2.2 Dividemulti-digitnumbersusing the standard algorithm.			
MAFS.6.NS.2.3 MAFS.6.NS.2.4		2.3 Add and subtract multi-digit decimals.			
		2.3 Multiply multi-digit decimals.			
		2.3 Divide multi-digit decimals.			
		2.4 Find greatest common factors.			
		2.4 Find least common multiples.			
		2.4 Use distributive property to isolate a common factor.			
MAFS.6.NS.3.5	Cluster 3	3.5 Relate positive and negative numbers to real situations.			
MAFS.6.NS.3.7		3.5 Write and identify opposites of integers.			
MAFS.6.NS.3.8		3.6 Relate opposite numbers in ordered pairs to reflections.			
		3.7 Compare rational numbers using a number line.			
		3.8 Graph or identify points in four quadrants.			
		3.8 Write comparisons for ordering rational numbers in real situations.			
		3.8 Solve problems involving coordinate graphs in four quadrants.			
		3.8 Find distance between two points with the same first or second coordinate.			
Geometry		1.3 Draw polygons given coordinates for the vertices.			
MAFS.6.G.1.3	Cluster 1	1.3 Use coordinates to calculate the length of vertical or horizontal segments.			

Grade: _6		Subject AreaMath	Quarter: _2_		
Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Expressions and Equations MAFS.6.EE.1.1 MAFS.6.EE.1.2 MAFS.6.EE.1.3 MAFS.6.EE.1.4	Cluster 1	 1.1 Evaluate numerical expressions that include exponents. 1.2 Write or interpret simple expressions with variables. 1.2 Identify parts of an expression using mathematical terms. 1.2 Evaluate expressions for specific values of variables. 1.2 Evaluate formulas for specific values. 1.3 Write equivalent expressions using the distributive property. 1.4 Identify when two expressions are equivalent. 			
MAFS.6.EE.2.5 MAFS.6.EE.2.6 MAFS.6.EE.2.7 MAFE.6.EE.2.8	Cluster 2	 2.5 Use substitution to decide if a number is a solution to an equation. 2.6 Use variables and expressions to represent situations. 2.7 Write equations of the form x + p = q to solve problems. 2.7 Write equations of the form px = q to solve problems. 2.8 Write or interpret inequalities x > c or x < c. 			
MAFS.6.EE.3.9	Cluster 3	3.9 Use two variables to represent two related quantities. 3.9 Graph ordered pairs of related quantities. 3.9 Write equations to describe related variables.			

Grade: _6		Subject AreaMath	Quarter: _3_		
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Ratios and Proportional Relationships MAFS.6.RP.1.1 MAFS.6.RP.1.2 MAFS.6.RP.1.3	Cluster 1	 1.1 Write and interpret ratios. 1.2 Find unit rates related to ratios. 1.3 Write equivalent ratios, including ratio tables. 1.3 Use ratios to convert measurements. 1.3 Plot pairs of ratios on the coordinate plane. 1.3 Solve unit rate problems such as unit pricing. 1.3 Write a fraction or ratio as a percent. 1.3 Find a number given the part and the percent. 1.3 Find a percent of a number. 			
Geometry MAFS.6.G.1.1 MAFS.6.G.1.2 MAFS.6.G.1.4	Cluster 1	 1.1 Find areas of triangles. 1.1 Decompose and compose shapes into triangles and rectangles. 1.1 Find areas of polygons. 1.2 Use cubes to find volumes of prisms with fractional edge lengths. 1.2 Multiply to find volumes of prisms with fractional edge lengths. 1.4 Represent 3-dimensional figures as nets. 			

Grade: _6 Subject AreaMath		Subject AreaMath	h Quarter: _4_		
Strand/Domain	Cluster	Standards-Based Essential Skills/Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Statistics and Probability MAFS.6.SP.1.1 MAFS.6.SP.1.2 MAFS.6.SP.1.3 MAFS.6.SP.2.4 MAFS.6.SP.2.5	Cluster 1 Cluster 2	 1.1 Recognize statistical questions. 1.2 Describe the center, spread (range), and shape of a data on a dot plot. 1.2 Find the median of a data set. 1.3 Recognize measures of center and variation of data. 2.4 Display and describe data on box plots. 2.5 Find quartiles and interquartile range. 2.5 Find the mean absolute deviation of a data set. 			

The standards listed below will be incorporated into the Science & Social Studies curriculum.

MAFS.6.SP.2.4 [}] Display numerical data in charts, graphs, and plots on a number line, including dot plots.

MAFS.6.SP.2.5 \rangle a. Reporting the number of observations.

b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.

*Review addition and subtraction of fractions in first quarter.

Grade: _7	ę	Subject AreaMath	Quarter:	_1_	
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
The Number System MAFS.7.NS.1.1	Cluster 1	 1.1 Relate sums of rational numbers to movements or situations. 1.1 Relate subtraction of rational numbers to adding the opposite. 1.1 Find distances between rational numbers on a number line. 1.1 Add and subtract integers. 1.1 Add and subtract rational numbers. 			
MAFS.7.NS.1.2 MAFS.7.NS.1.3		 			
Expressions and Equations MAFS.7.EE.1.1 MAFS.7.EE.1.2	Cluster 1	 1.1 Add and subtract linear expressions with rational coefficients. 1.1 Expand or factor linear expressions. 1.2 Interpret related expressions in real situations. 			

Grade: _7		Subject AreaMath	Quarter: _2_			
Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference	
Expressions and Equations	Cluster 2	2.3 Use operations with whole numbers to solve multi-step problems.				
MAFS.7.EE.2.3 MAFS.7.EE.2.4		2.3 Use fractions to solve multi-step problems.				
		2.3 Use decimals to solve multi-step problems.				
		2.4 Assess reasonableness of answers by using estimation.				
		2.4 Solve linear equations of form $px + q = r$ and $p(x + q) = r$.				
		2.4 Write linear equations to solve word problems.				
		2.4 Relate algebraic solutions to arithmetic solutions.				
		2.4 Write and solve linear inequalities for situations.				
		2.4 Graph and interpret solutions to inequalities.				
Statistics and	Cluster 1	1.1 Identify representative sampling methods.				
Probability		1.2 Use a sample to draw inferences about a population.				
MAFS.7.SP.1.1 MAFS.7.SP.1.2	Cluster 2	2.3 Visually compare the centers and spreads of distributions on dot plots.				
MAFS.7.SP.2.3 MAFS.7.SP.2.4		2.3 Compare predictions from various samples.				
		2.4 Use measures of center and variability to makeinferences.				

Grade: _7		Subject AreaMath	Quarter: _3_		
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Ratios and Proportional Relationships MAFS.7.RP.1.1 MAFS.7.RP.1.2 MAFS.7.RP.1.3	Cluster 1	 1.1 Calculate unit rates associated with ratios of fractions. 1.1 Decide if two ratios or fractions form a proportion. 1.2 Find the missing value in a proportion. 1.2 Identify unit rates from tables, diagrams, or graphs. 1.2 Identify unit rates from equations or verbal descriptions. 1.2 Identify unit rates for proportional relationships. 1.2 Interpret points on graphs of proportions. 1.3 Use percent to solve simple interest and tax problems. 1.3 Use percent to solve problems about tips, commissions, and fees. 1.3 Solve problems about percent increase or decrease. 1.3 Calculate percent error. 			
Geometry MAFS.7.G.2.4 MAFS.7.G.2.5 MAFS.7.G.2.6	Cluster 2	 2.4 Recognize relationships between parts of a circle. 2.4 Apply formulas for circumference and area of circles. 2.5 Solve equations to find supplementary, complementary, vertical, and adjacent angles. 2.6 Solve problems involving area and surface area. 2.6 Solve problems involving volume of rectangular prisms. 			

• Although measurement is not found in the 7th grade standards, it should be emphasized throughout the curriculum:

Estimate & measure with appropriate precision the length/distance, time, temperature, weight, mass, and volume.

Grade: _7		Subject AreaMath		Quarter: _4_			
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference		
Statistics and Probability MAFS.7.SP.3.5 MAFS.7.SP.3.6 MAFS.7.SP.3.7 MAFS.7.SP.3.8	Cluster 3	 3.5 Compare probabilities and relate to likelihoods of events. 3.5 Calculate simple probabilities based on equally-likelyoutcomes. 3.6 Use relative frequency of outcomes to approximate probability. 3.7 Use a model to determine probability of events. 3.7 Make predictions based on relative frequency, and compare results to predictions. 3.8 Calculate probabilities of compound events. 3.8 Create an organized list, table, or tree diagram for a compound event. 					
Geometry MAFS.7.G.1.1 MAFS.7.G.1.2 MAFS.7.G.1.3	Cluster 1	 1.1 Compute lengths and areas from a scale drawing. 1.2 Reproduce scale drawing using a different scale. 1.2 Draw triangles given measures of sides or angles. 1.2 Draw geometric shapes with given conditions. 1.3 Describe two-dimensional figures that result from slicing solids. 					

The standards listed below will be incorporated into the Art and Technology curriculum.

MAFS.SP.7.1.2 > Draw geometric shapes with given conditions.

MAFS.SP.7.1.3 } Describe two-dimensional figures that result from slicing solids.

The standards listed below will be incorporated into the Science curriculum.

MAFS.7.SP.1.1 Compare predictions from various samples.

MAFS.7.SP.2.3 } Use measures of center and variability to make inferences.

MAFS.7.SP.2.4 } Visually compare the centers and spreads of distribution on dot plots.

Grade: _8___

Subject Area____Math_____

Quarter: _1_

Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
The Number System MAFS.8.NS.1.1 MAFS.8.NS.1.2	Cluster 1	1.1 Identify rational and irrational numbers1.1 Convert repeating decimals to rational numbers1.1 Convert repeating decimals to rational numbers.	Assessment	Assessment	Reference
		1.2 Find approximations for irrational numbers.			
Expressions and Equations MAFS.8.EE.1.1 MAFS.8.EE.1.2 MAFS.8.EE.1.3 MAFS.8.EE.1.4	Cluster 1	 1.1 Simplify and evaluate numerical expressions with integer exponents. 1.1 Develop and apply properties of exponents. 1.2 Use square root and cube root symbols. 1.2 Evaluate square roots and cube roots. 1.3 Convert between standard notation and scientific notation. 1.4 Use scientific notation to compare relative sizes of numbers. 			
MAFS.8.EE.3.7	Cluster 3	 1.4 Convert measurement results to appropriate units. 3.7 Simplify and solve linear equations by writing equivalent forms. 3.7 Identify or write equations with 0, 1, or infinitely many solutions. 3.7 Simplify and solve linear equations with rational coefficients 			

Grade: _8	Subject AreaMath		Quarter: _2_		
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Geometry MAFS.8.G.1.1 MAFS.8.G.1.2 MAFS.8.G.1.3 MAFS.8.G.1.4 MAFS.8.G.1.5	Cluster 1	 1.1 Identify congruent parts in rotations, reflections, and translations. 1.2 Identify transformations that move a figure onto a congruent figure. 1.3 Use coordinates to describe translations, reflections, and rotations. 1.3 Use coordinates to describe dilations. 1.3 Use coordinates to describe dilations. 1.4 Compare ratios of side lengths to decide if two figures are similar. 1.4 Identify the scale factor that enlarges or reduces a figure to match a similar figure. 			
MAFS.8.G.2.6 MAFS.8.G.2.7 MAFS.8.G.2.8	Cluster 2	 1.5 Identify transformations that move a figure onto a similar figure. 1.5 Justify and calculate angle measures in triangles and line figures. 1.5 Justify the angle-angle criterion of similar triangles. 2.6 Explain a proof of the Pythagorean Theorem and its converse. 2.7 Use the Pythagorean Theorem to find lengths. 2.8 Use the Pythagorean Theorem to find distance between points. 			

Grade: _8		Subject AreaMath	Quarter: _3_		
Strand/ Domain	Cluster	Standards-based Essential Skills/ Concepts to be Targeted & Instructional Strategies	Formative Assessment	Summative Assessment	Text Reference
Expressions and Equations MAFS.8.EE.2.5 MAFS.8.EE.2.6	Cluster 2	 2.5 Graph proportional relationships. 2.5 Compare two representations of a proportional relationship. 2.6 Use similar triangles to verify that a line has constant slope. 2.6. Relate linear equations to slopes and intercepts. 			
Statistics and Probability MAFS.8.SP.1.1 MAFS.8.SP.1.2 MAFS.8.SP.1.3 MAFS.8.SP.1.4	Cluster 1	 1.1 Construct scatter plots. 1.1 Interpret scatter plots. 1.2 For data that appear to be linear, estimate a line of best fit. 1.3 Informally assess the fit of a linear model. 1.4 Interpret a linear model for real-world data. 1.4 Compare frequencies and relative 			
Geometry MAFS.8.G.3.9	Cluster 3	3.9 Apply the formula for volume of a cone. 3.9 Apply the formula for volume of a cylinder. 3.9 Apply the formula for volume of a sphere.			

Grade: _8		Subject AreaMath	Quarter: _4_		
Functions	Cluster 1			٦	
MAFS.8.F.1.1 MAFS.8.F.1.2 MAFS.8.F.1.3		 1.1 Understand that a function is a rule. 1.2 Compare two representations of a function. 1.3 Decide if a function is linear or non-linear. 			
MAFS.8.F.2.4 MAFS.8.F.2.5	Cluster 2	 2.4 Identify rate of change from a graph, table, or description. 2.4 Identify initial value of a function from a graph, table, or description. 2.4 Write a function from the rate of change and initial value. 2.5 Describe features on a non-linear function from its graph. 2.5 Sketch a graph from a verbal description of its features. 			
Expressions and Equations MAFS.8.EE.3.8	Cluster 3	 3.8 Identify the solution to a system of two linear equations as the intersection point. 3.8 Solve systems of two linear equations algebraically. 3.8 Estimate the solution to two linear equations by graphing. 3.8 Solve problems involving systems of two linear equations. 			