







**Subject: Mathematics**

**Grade: Kindergarten**

**Instructional Scope**

Standard 4.4 Data Analysis and Discrete Mathematics: All students will be able to collect, organize, and display relevant data to answer questions that can be addressed with data; use appropriate statistical methods to develop and evaluate inferences and predictions that are based on data; and apply basic concepts of probability in order to make informed choices and reasonable decisions about information presented.	Instructional Sequence									
	Trimester 1			Trimester 2			Trimester 3			
	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
<b>Strand A: Data Analysis, Statistics, and Probability</b>										
Collect, sort, organize and draw conclusions using concrete objects, pictures and numbers.			X							
Construct picture graphs (where a picture represents a single object) and Venn diagrams to describe members of a set (small number amounts).			X							
<b>Strand B: Discrete Mathematics and Algorithms</b>										
Observe the regularity of meaningful events and determine the likelihood of future incidences.						X				



**Subject: Mathematics**

**Grade: 1**

**Instructional Scope**

Standard 4.1 Number and Numerical Operation: All students will understand the meaning of numbers, how they may be represented and the relationship among them. They will perform computations and acquire relationship.	Instructional Sequence									
	Trimester 1			Trimester 2				Trimester 3		
	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
<b>Strand A: Number Sense</b>										
Represent equivalence relationships of sets of objects by writing number sentences using the '=' symbol.		X								
Count, read, and write whole numbers to 100 by ones and tens.					X					
Count and group objects in ten and ones.				X						
Compare and order whole numbers to 100 and identify and name ordinals through 31st.				X						
Identify the number of tens and ones in numbers less than 100.					X					
Name the number that is one more or one less than any number up to 100.				X						
Match the number names (first, second, third, etc.) with an ordered set of up to 10 items.				X						
Recognize and describe a shaded portion of a shape that has been divided into equal parts; describe the portion as "___ out of ___" parts and write the fraction.							X			
<b>Strand B: Numerical Operations</b>										
Show equivalent forms of the same number (up to 20) using objects, diagrams, and numbers.	X									
Demonstrate the meaning of addition (putting together, increasing) using objects.	X									
Demonstrate the meaning of subtraction (taking away, comparing and finding differences using differences).		X								
Use a +, -, and = to write number sentences.			X							
Use the inverse operation relationship between addition and subtraction and demonstrate mastery of addition facts (for totals up to 20) and the corresponding subtraction facts.									X	
Use the commutative, associative, and zero properties of addition.			X							



**Subject: Mathematics**

**Grade: 1**

**Instructional Scope**

Standard 4.3 All students will represent and analyze relationships among variable quantities and solve problems involving patterns, functions and algebraic concepts and processes.	Instructional Sequence									
	Trimester 1			Trimester 2			Trimester 3			
	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
<b>Strand A: Patterns</b>										
Create and extend number patterns using addition.		X								
Write and solve number sentences from problem situations involving addition and subtraction using symbols (+, -, =).				X						
Create word problems that match given number sentence situations involving addition and subtraction.				X						
Relate the number 0 to adding or subtracting nothing.		X								
Distinguish odd and even numbers.				X						
Demonstrate the inverse operation relationship between addition and subtraction by undoing an addition problem with subtraction and vice-versa.									X	
<b>Strand B: Functions and Relationships</b>										
* Focus at this grade level is only patterns, not functions and relationships.			X							







**Subject: Mathematics**

**Grade: 2**

**Instructional Scope**

Standard 4.1 Number and Numerical Operations: All students will understand the meaning of numbers, how they may be represented and the relationships among them. They will perform computations and acquire knowledge of the physical world from the point of view of quantitative relationships.	Instructional Sequence								
	Trimester 1			Trimester 2			Trimester 3		
	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>Strand A. Number Sense</b>									
Count by ones, twos, fives, and tens to 100.	X								
Compare and order whole numbers through hundreds.	X								
Identify numbers up to 999 in various combinations of hundreds, tens, and ones.	X								
Use symbols < and > to compare numbers.		X							
Name the number that is ten more or ten less than any number up to 100.					X				
Match the number names (first, second, third, etc.) with an ordered set of up to 100.						X			
Recognize, name and compare unit fractions (denominators 2, 3, 4, 5, 6, 8, and 10).								X	
Identify fractional representations of a whole or the number 1.								X	
<b>Strand B. Numerical Operations</b>									
Model addition of numbers less than 100 with objects and pictures.	X								
Use estimation to decide whether answers are reasonable in addition problems.		X							
Develop fluency with efficient procedures, including standard algorithms, for adding and subtracting whole numbers, understand why they work and use them to solve problems.		X							
Select and apply appropriate methods to estimate sums and differences or calculate them mentally, depending on the context and numbers involved.					X				
Use mental arithmetic to add and subtract 0,1,2,3,4,5, or 10 with numbers less than 100.						X			
Subtract two whole numbers less than 100 without regrouping.						X			
Add two whole numbers with and without regrouping.		X					X		

**Subject: Mathematics****Grade: 2****Instructional Scope**

Standard 4.2 All students will develop spatial sense and the ability to use geometric properties, relationships and measurements to model, describe and analyze phenomena.	Instructional Sequence									
	Trimester 1			Trimester 2				Trimester 3		
	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
<b>Strand A. Geometric Properties</b>										
Define a general triangle and identify and distinguish among isosceles, equilateral, right, and obtuse triangles.								X		
Identify various quadrilaterals (rectangles, trapezoids, parallelograms, and squares), pentagons and hexagons.									X	
Describe, classify, and sort plane and solid geometric shapes (triangle, square, rectangle, cube, rectangular prism) according to the number of sides, edges and/or vertices.									X	
Identify congruent two dimensional shapes in any position.									X	
Investigate and predict the result of putting together and taking apart two-dimensional and three-dimensional shapes.									X	
<b>Strand B. Measurement</b>										
Find the value of a collections of pennies, nickels, dimes, quarters, half-dollars.					X					
Identify relationships of time: seconds in a minute, minutes in an hour, hours in a day, days in a week, and days, weeks and months in a year.						X				
Tell time to the nearest quarter hour and know the difference between a.m. and p.m.						X				
Find the duration of intervals of time in hours.						X				
Identify the need for a standard unity of weight.								X		
Measure and estimate to nearest inch, foot, yard, centimeter and meter.								X		
Describe the relationships among inch, foot and yard and the relationship between centimeter and meter.								X		
Decide which unit of length is most appropriate in a given situation.								X		
Estimate area and use an object to measure the area of other objects.									X	
Estimate and measure capacity using cups and pints.								X		
Estimate weight and use a given object to measure the weight of other objects.									X	
Estimate temperature and read a thermometer in Celsius and Fahrenheit.					X					

**Subject: Mathematics**

**Grade: 2**

**Instructional Scope**

Standard 4.3 Patterns and Algebra: All students understand how patterns, relations, and functions are interrelated; be able to represent and analyze mathematical situations and structures using algebraic symbols; use mathematical models to understand quantitative relationships; and analyze change in various contexts.	Instructional Sequence									
	Trimester 1			Trimester 2			Trimester 3			
	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
<b>Strand A. Patterns</b>										
Create number patterns in distinct ways by skip counting forward or backward and by "adding two" or "+2".		X								
Create patterns that grow or shrink as a result of repeatedly adding or subtracting a fixed number.		X								
Recognize and extend a linear pattern by its rules and continue the pattern to find how many at each step (e.g., when counting legs, adding 1 horse adds 4 legs...find how many legs eight horses have.).			X							
<b>Strand B. Functions &amp; Relationships</b>										
Write and solve number sentences from problem situations involving addition and subtraction rules.		X								
Create word problems that match given number sentences involving addition and subtraction.			X							
Recognize and use the inverse operation relationship between addition and subtraction.				X						
Recognize and describe changes over time as a one-to-one relationship between number pairs.				X						













Subject: **Mathematics**

Grade: **4**

**Instructional Scope**

Standard 4.5 Core Mathematical Processes All students will use mathematical processes of problem-solving communication, connections, reasoning, representations, and technology to solve problems and communicate mathematical ideas.	Instructional Sequence									
	Trimester 1			Trimester 2			Trimester 3			
	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
<b>Strand A:</b>										
Determine the question(s) to be answered in a given problem situation.	X									
Select and use one or more appropriate strategies to solve a problem and explain why that strategy was chosen.	X									
Identify information that is given in a problem and decide whether it is essential or extraneous to the solution of the problem.	X									
Represent a problem situation using words, numbers, pictures, physical objects, or symbols.	X									
Explain why a specific problem solving strategy or procedure was used to determine a solution.	X									
Analyze and evaluate whether a solution is reasonable, is mathematically correct and answers the question.	X									
Determine whether a problem to be solved is similar to previously solved problems and identify possible strategies for solving the problem.	X									
Identify missing information needed to solve a problem.	X									
Summarize mathematical information, draw conclusions and explain reasoning.	X									
Make and test conjectures based on data (or information) collected from explorations and experiments.				X						
Use technology to gather, analyze and communicate mathematical information.				X						

















**Subject: Mathematics****Grade: 5****Instructional Scope**

Standard 4.1 Number and Numerical Operations All students will understand the meaning of numbers, how they may be represented and the relationships among them. They will perform computations and acquire knowledge of the physical world from the point of view of quantitative relationships.	Instructional Sequence									
	Trimester 1			Trimester 2			Trimester 3			
	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
<b>Strand A. Number Sense</b>										
Convert between numbers in words and numbers in figures for numbers up to millions and decimals to millionths.	X									
Round whole numbers and decimals to any place.	X									
Explain different interpretations of fractions: as parts of a whole, parts of a set and division of whole numbers by whole numbers.			X							
Use whole numbers, fractions, and decimals to represent equivalent forms of the same number.				X						
Use factors and multiples to write equivalent forms of common fractions.				X						
Compare and order fractions and decimals.				X						
Identify percent as part of a hundred; find decimal and percent equivalents for common fractions and explain why they all represent the same number.					X					
Identify and represent on a number line positive and negative integers.										X
<b>Strand B. Numerical Operations</b>										
Use estimation to decide whether answers are reasonable in addition, subtraction, multiplication and division problems.	X									
Use mental arithmetic to add or subtract simple decimals.	X									
Solve problems involving multiplication and division of any whole numbers.		X								
Add and subtract decimals and estimate to verify the reasonableness of the results.			X							
Add and subtract fractions (including mixed numbers) with different denominators.					X					
Use models to show an understanding of multiplication and division of fractions.						X				
Multiply and divide fractions to solve problems.							X			



**Subject: Mathematics**

**Grade: 5**

**Instructional Scope**

Standard 4.3 Patterns and Algebra All students understand how patterns, relations, and functions are interrelated; be able to represent and analyze mathematical situations and structures using algebraic symbols; use mathematical models to understand quantitative relationships; and analyze change in various texts.	Instructional Sequence									
	Trimester 1			Trimester 2			Trimester 3			
	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
<b>Strand A. Patterns</b>										
Describe and create a rule for arithmetic and geometric sequences and extend the patterns.		X								
Describe the graphs of sets of ordered pairs of positive number that are linearly related such as (3,1), (6,2), and (9,3), or the same data as a T-chart.			X							
<b>Strand B. Functions &amp; Relationships</b>										
Write simple algebraic expressions with one or two variables that represent simple situations and evaluate them by substitution.		X								
Graph points satisfying a function from T-charts or a list of ordered pairs and determine if the plot is a linear relation.		X								
Find ordered pairs (positive numbers only) that fit a linear equation, graph the ordered pairs and draw the line they determine.		X								
Use data taken from a graph or equation to answer questions about a problem situation.			X							

**Subject: Mathematics**

**Grade: 5**

**Instructional Scope**

<b>Standard 4.4 Data Analysis and Discrete Mathematics</b> All students will be able to collect, organize, and display relevant data to answer questions that can be addressed with data; use appropriate statistical methods to develop and evaluate inferences and predictions that are based on data; and apply basic concepts of probability in order to make informed choices and reasonable decisions about information presented.	<b>Instructional Sequence</b>								
	Trimester 1			Trimester 2			Trimester 3		
	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>Strand A. Data Analysis, Statistics and Probability</b>									
Calculate the average (mean) of a data set that includes whole numbers, fractions and decimals.						X			
Solve word problems involving average (e.g., Find the sum of a data set given the average and the number of items; or find the missing number of a set given the average and all but one of the numbers).						X			
Identify ordered pairs of data from a graph and interpret the meaning of the data in terms of the situation depicted by the graph.			X						
<b>Strand B. Discrete Math and Algorithms</b>									
Follow, devise, and describe practical sets of directions related to numerical operations, such as multiplying two-digit numbers.					X				
Solve counting problems and justify that all possibilities have been enumerated without duplication.						X			
Describe vertex-edge graphs and tree diagrams with regard to "degree of a vertex" and "connectedness".						X			





**Subject: Mathematics**

**Grade: 6**

**Instructional Scope**

Standard 4.1 Number and Numerical Operations: All students will understand the meaning of numbers, how they may be represented and the relationships among them. They will perform computations and acquire knowledge of the physical world from the point of view of quantitative relationships.	Instructional Sequence									
	Trimester 1			Trimester 2			Trimester 3			
	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
<b>Strand A. Number Sense</b>										
Compare, order, and represent on a number line positive and negative integers, decimals (to hundredths), fractions and mixed numbers.	X									
Find the absolute value (distance from zero) of real numbers.	X									
Find the least common multiple and the greatest common factor of whole numbers.		X								
Identify decimal equivalents of commonly used fractions without calculating.			X							
Compare two quantities using appropriate ratio notation ( $a/b$ , $a:b$ , $a$ to $b$ ).				X						
Convert between any two representations of numbers (fractions, decimals, and percents).				X						
<b>Strand B. Numerical Operations</b>										
Add, subtract, multiply and divide positive and negative integers.	X									
Use mental arithmetic to add or subtract simple fractions and decimals.		X								
Use estimation to determine whether answers are reasonable in decimal problems.		X								
Multiply and divide decimals.			X							
Explain how to multiply and divide positive fractions and perform the calculations.			X							
Solve problems involving addition, subtraction, multiplication, and division of positive fractions and explain why a particular operation was used for a given situation.			X							
Use proportions to solve problems.				X						
Calculate solutions given percentages of quantities and solve problems involving discounts, interest, and tips.				X						

**Subject: Mathematics****Grade: 6****Instructional Scope**

Standard 4.2 All students will develop spatial sense and the ability to use geometric properties, relationships and measurements to model, describe and analyze phenomena.	Instructional Sequence									
	Trimester 1			Trimester 2				Trimester 3		
	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
<b>Strand A. Geometric Properties</b>										
Identify and draw vertical, adjacent, complimentary and supplementary angles and describe these angle relationships.					X					
Use the properties of complimentary, supplementary, and vertical angles to solve the problems involving an unknown angle and justify answers.					X					
Recognize that the sum of the interior angles of any triangle is 180 degrees and the sum of the interior angles of a quadrilateral is 360 degrees.					X					
Draw the translation and reflection of shapes.						X				
Draw two-dimensional views of three-dimensional objects made from a rectangular solid.							X			
<b>Strand B. Measurement</b>										
Add, subtract, multiply, and divide with money in decimal notation.	X									
Use a formula to convert between Celsius and Fahrenheit.		X								
Select and apply appropriate standard units and tools to measure length, area, volume, weight, time, temperature, and the size of angles.			X							
Use larger units to measure length, comparing miles to yards and kilometers to meters.			X							
Use larger units to measure area, comparing square miles to square feet and square kilometers to square meters.			X							
Round answers to an appropriate number of significant figures.						X				
Use common estimates for the value of pie to estimate and calculate the circumference and area of circles and compare with actual measurements.						X				
Develop and use formulas for the circumference and area of a circle using the concept that pie is the ratio of the circumference to the diameter of a circle.						X				
Use strategies to find the surface area and volume of right prisms and cylinders using appropriate units.							X			
Construct a 3-dimensional box from 2-dimensional patterns and use the patterns to compute the surface area of these objects.							X			









**Subject: Mathematics**

**Grade: 7**

**Instructional Scope**

Standard 4.1 Number and Numerical Operations: All students will understand the meaning of numbers, how they may be represented and the relationships among them. They will perform computations and acquire knowledge of the physical world from the point of view of quantitative relationships.	Instructional Sequence									
	Trimester 1			Trimester 2			Trimester 3			
	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
<b>Strand A. Number Sense</b>										
Convert terminating decimals into fractions in the simplest form.		X								
Use exponential notation to write whole number powers of whole numbers and find prime factorization of whole numbers using exponents.		X								
Read, write, compare, and solve problems using whole numbers in scientific notation.		X								
Find the square roots of perfect squares by using the inverse operation relationship between squaring and finding the square root.						X				
Differentiate between rational and irrational numbers.						X				
Compare and order rational and common irrational numbers and place them on a number line.						X				
<b>Strand B. Numerical Operations</b>										
Use mental arithmetic to compute with simple fractions, decimals, and exponents.	X									
Solve addition, subtraction, multiplication, and division problems that use integers, fractions, decimals and combinations of the four operations.	X									
Use estimation to decide whether answers are reasonable in problems involving fractions and decimals.	X									
Solve problems that involve tips and commission.				X						
Calculate the percentage of increase and decrease of a quantity.				X						

**Subject: Mathematics**

**Grade: 7**

**Instructional Scope**

Standard 4.2 Geometry and Measurement: All students will develop spatial sense and the ability to use geometric properties, relationships, and measurement to model, describe, and analyze phenomena.	Instructional Sequence									
	Trimester 1			Trimester 2			Trimester 3			
	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
<b>Strand A. Geometric Properties</b>										
Plot simple shapes and find images under translations ( <i>slides</i> ) rotations ( <i>turns</i> ) and reflection ( <i>flips</i> ) that are congruent to pre-images.							X			
Use the Pythagorean Theorem to find the length of the missing sides of a right triangle and the length of the other segments.							X			
Construct two-dimensional patterns ( <i>nets</i> ) for three-dimensional objects such as prisms, pyramids, cylinders and cones.							X			
<b>Strand B. Measurement</b>										
Compare lengths, areas, volumes, weights, capacities, times and temperatures within measurement systems.						X				
Use modeling and proportions to solve similarity problems.						X				
Read and create drawings made to scale, construct scale models and solve problems related to scale.						X				
Use objects and geometry modeling tools to find the surface area of the faces and volume of a three-dimensional object built from rectangular solids.						X				
Use formulas for finding the perimeter and area of two-dimensional basic shapes and the surface area and volume of basic three-dimensional shapes including rectangles, parallelograms, trapezoids, triangles, circles, right prisms and cylinders.						X				
Estimate and compute the areas of more complex or irregular two-dimensional shapes by dividing them into more basic shapes.						X				

**Subject: Mathematics**

**Grade: 7**

**Instructional Scope**

Standard 4.3 Patterns and Algebra: All students understand how patterns, relations, and functions are interrelated; be able to represent and analyze mathematical situations and structures using algebraic symbols; use mathematical models to understand quantitative relationships; and analyze change in various contexts.	Instructional Sequence									
	Trimester 1			Trimester 2				Trimester 3		
	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
<b>Strand A. Patterns</b>										
Create and extend sequences involving rational numbers, including finite and infinite sequences.							X			
Use variables to translate verbal descriptions into equations and formulas.							X			
Match or determine the formula that fits the graph of an inequality.								X		
Given graphs of linear and non-linear functions, relate/match the shapes of the graphs to a set of algebraic equations.								X		
<b>Strand B. Functions and Relationships</b>										
Evaluate numerical expressions and simplify algebraic expressions by applying the correct order of operations and properties of real numbers (e.g. identity, inverse, commutative, associative, and distributive properties) and justify each step in the process.		X								
Write and solve two-step linear equations and inequalities with one variable and check answers. (e.g., solve $4x - 12 = 12$ and check the answer).			X							
Solve single- and multi-step word problems involving rational numbers and verify the solutions.			X							
Solve an equation or formula with two variables for a particular variable (e.g. solve the formula $C = 2\pi r$ for $r$ ).						X				
Find the slope of a line from its graph given that the slope is defined as vertical change per unit of horizontal change (e.g., draw the graph of $y = 2x - 1$ , choose two points on the graph and divide the change in the $y$ -value by the change in the $x$ -value).							X			
Draw the graph of a line given its slope and one point on the line, or two points on the line (e.g., graph a line passing through point (0,2) with slope 3).							X			
Identify functions as linear or non-linear and recognize distinguishing characteristics in the equations, tables, and graphs (e.g., a constant rate of change (slope) describes a linear function).								X		







**Subject: Mathematics**

**Grade: 8**

**Instructional Scope**

Standard 4.1 All students will develop number sense and will perform standard numerical operations and estimations on all types of numbers in a variety of ways.	Instructional Sequence									
	Trimester 1			Trimester 2			Trimester 3			
	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
<b>Strand A. Number Sense</b>										
Determine the fractional equivalence for repeating decimals.			X							
Read, write, compare, and solve problems using decimals in scientific notation.						X				
Evaluate negative integer exponents.						X				
Use laws of integer exponents to evaluate expressions.						X				
<b>Strand B. Numerical Operations</b>										
Use estimation techniques to decide whether answers to computations on a calculator are reasonable.	X									
Add, subtract, multiply, and divide rational numbers (integers, fractions, and terminating decimals) in multi-step problems.			X							
Find approximations of square root.			X							
Use mental arithmetic to compute fractions, decimals, powers, and percents.					X					
Solve problems by computing simple and compound interest.						X				
Solve problems involving operations with numbers in scientific notation.						X				

**Subject: Mathematics****Grade: 8****Instructional Scope**

Standard 4.2 All students will develop spatial sense and the ability to use geometric properties, relationships and measurements to model, describe and analyze phenomena.	Instructional Sequence									
	Trimester 1			Trimester 2				Trimester 3		
	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
<b>Strand A. Geometric Properties</b>										
Draw the translation (slide), rotation (turn), reflection (flip), and dilation (stretches and shrinks) of shapes.		X								
Use the Pythagorean Theorem and its converse to solve problems in two and three dimensions.							X			
Identify and describe basic properties of geometric shapes: altitudes, diagonals, angle, and perpendicular bisectors, central angles, radii, diameters, and chords.							X			
Identify properties of three-dimensional objects (e.g. diagonals of rectangular solids) and describe how three-dimensional objects intersect a plane.									X	
Perform simple constructions, such as bisectors of segments and angles and perpendicular segments.										X
<b>Strand B. Measurement</b>										
Solve simple problems involving rates and derived measurements, such as velocity and density.				X						
Convert common measurements for length, are, volume, weight, capacity, and time to equivalent measurements within the same system.				X						
Solve problems involving scale factors, area and volume using ratio and proportion.					X					
Use formulas for finding the perimeter and area of basic two-dimensional shapes and the surface area and volume of basic three-dimensional shapes including rectangles, parallelograms, trapezoids, triangles, circles, prisms, cylinders, spheres, cones, and pyramids.							X			
Estimate and compute the area of irregular two-dimensional shapes and the volume of irregular three-dimensional objects breaking them into more basic shapes and geometric objects.							X			

**Subject: Mathematics****Grade: 8****Instructional Scope**

Standard 4.3 All students will represent and analyze relationships among variable quantities and solve problems involving patterns, functions and algebraic concepts and processes.	Instructional Sequence									
	Trimester 1			Trimester 2			Trimester 3			
	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
<b>Strand A: Patterns</b>										
Describe the similarities and differences of graphic representations of simple quadratic functions using verbal descriptions, tables and graphs.										X
Describe the similarities and differences of graphs of various exponential functions.										X
<b>Strand B: Functions and Relationships</b>										
Evaluate numerical expressions and simplify algebraic expressions involving exponents (positive and negative) using the laws of exponents and the order of operations.	X									
Write and solve two-step linear equations and inequalities with one variable, interpret the solution or solutions in their context and verify the reasonableness of the results.	X									
Solve linear equations and inequalities (integer coefficients and rational solutions) using formal algebraic methods, i.e., by citing the appropriate addition or multiplication property of equality or inequality used at each step.	X									
Graph linear functions such as $y=mx+b$ (or as standard form) and identify positive or negative slopes and x- and y- intercepts.							X			
Demonstrate "rate" as a measure of one quantity with respect to another, and recognize that the graph of $y=kx$ (as special case of $y=m+b$ ), is a line with slope k that passes through the origin (0,0).							X			
Find the slope of a linear function given the equation a write the equation of a line given the slope and any given point on the line.								X		
Solve single and multi-step word problems involving linear functions (including rates) and verify the solution.								X		





