Current Staff						
Course	Earth Science					
Unit/ Length	Unit Objectives/ Big Ideas	Basic Outline/ Structure	Materials/ Text	Content Vocabulary	Next Gen/CCSS	Assessments & Activities
Chapter 1 (16 to 20 days)	**FOUNDATIONS FOR ALGEBRA** ● **Students will learn to write and evaluate expressions with unknown values** ● **Properties are used to simplify expressions**	Lessons 1-1 to 1-9	ALGEBRA 1 COMMON CORE PEARSON (scientific calculator)	additive inverse, algebraic expression, coefficient, equivalent expressions, evaluate, integers, like terms, order of operations, real number, simplify, term, variable	N.Q. A.SSE.1.a A.CED.2 A.REI.10	Lesson Assessments Mid Chapter Quiz End of Chapter Quiz End of Chapter Test
Chapter 2 (16 to 20 days)	**SOLVING EQUATIONS** ● **Students will find equivalent equations using inverse operations and simplification** ● **Students will solve equations using addition, subtraction, multiplication, or division** ● **Students will use the Distributive Property to simplify expressions and solve equations** ● **Students will use the Multiplication Property of Equality and the Cross Products Property to solve proportions** ● **Students will calculate unit rates** ● **Students will use proportions to solve problems involving percents, measurements in similar figures and indirect measurement**	Lessons 2-1 to 2-10	ALGEBRA 1 COMMON CORE PEARSON (scientific calculator)	conversion factor, cross products, equivalent equations, formula, inverse operations, literal equations, percent change, proportions, rate, ratio, scale, unit analysis	N.Q.1 N.Q.3 A.CED.1 A.CED.4 A.REI.1 A.REI.3	Lesson Assessments Mid Chapter Quiz End of Chapter Quiz End of Chapter Test

	● Students will use scale drawings such as maps					
Chapter 3 (16 to 20 days)	**SOLVING INEQUALITIES** ● **Students will learn to write and graph inequalities** ● **Students will use properties to generate equivalent inequalities** ● **Equivalent inequalities are generated by using the properties of inequalities** ● **Inequality symbols are reversed when multiplying or dividing both sides of an inequality by negative number**	Lesson 3-1 to 3-8	ALGEBRA 1 COMMON CORE PEARSON (scientific calculator)	Complement of a set, compound inequality, disjoint sets, empty set, equivalent inequalities, intersection, interval notation, roster form, set-builder notation, solution of an inequality, union, universal set	A.SSE.1.b A.CED.1 A.REI.3	Lesson Assessments Mid Chapter Quiz End of Chapter Quiz End of Chapter Test
Chapter 4 (16 to 20 days)	**AN INTRODUCTION TO FUNCTIONS** ● **Students will represent functions using tables, equations, and graphs** ● **Students will use function notation** ● **Students will represent arithmetic sequences using functio rules** ● **Graphs will be used to relate two quantities** ● **Students will model real-world situations that are continuous and real-world situations that are discrete**	Lesson 4-1 to 4-7	ALGEBRA 1 COMMON CORE PEARSON (scientific calculator)	continuous graph, dependent variable, discrete graph, domain, function, independent variable, linear function, nonlinear function, range, recursive formula, relation, sequence	N.Q.1 N.Q.2 A.SSE.1.b A.CED.2 A.REI.10 A.REI.11 F.IF.1 F.IF.2 F.IF.3 F.IF.4 F.IF.5 F.BF.1.a F.F.2 F.LE.2	Lesson Assessments Mid Chapter Quiz End of Chapter Quiz End of Chapter Test
Chapter 5 (16 to 20 days)	**LINEAR FUNCTION** ● Students will find slope using a formula ● Students will find slope using a graph	Lesson 5-1 to 5-8	ALGEBRA 1 COMMON CORE PEARSON (scientific calculator)	direct variation, linear equation, piecewise function, point-slope form, rate of change, slope, slope-intercept	N.Q.1 N.Q.2 A.SSE.2 A.CED.2 F.IF.4	Lesson Assessments Mid Chapter Quiz End of Chapter Quiz End of Chapter Test

	● Students will analyze various slopes and describe their meaning ● The equation of a line gives its slope ● The equation of a lie gives its y-intercept ● Students will find the line of best fit ● Students will analyze trend lines in scatter plots			form, standard form, step function, trend line, x-intercept, y-intercept	F.IF.6 F.IF.7.a F.IF.7.b F.BF.1.a F.BF.3 F.BF.4.a F.LE.1.b F.LE.2 G.GPE.5 S.ID.6.a S.ID.6.b S.ID.6.c S.ID.7 S.ID.8 S.ID.9	
Chapter 6 (16 to 20 days)	**SYSTEMS OF EQUATIONS AND INEQUALITIES** ● **Students will learn to solve systems of equations or inequalities by graphing** ● **Students will learn to solve systems of equations by substitution** ● **Students will learn to solve systems of equation by elimination** ● **Students will write equations and inequalities to represent situations** ● **Students will examine constraints placed on real-world situations**	Lesson 6-1 and 6-6	ALGEBRA 1 COMMON CORE PEARSON (scientific calculator)	consistent, dependent, elimination method, inconsistent, independent, linear inequality, solution of an inequality, solution f a system of linear equations, solution of a system of linear inequalities, substitution method	N.Q.2 N.Q.3A.CED.3 A.REI.5 A.REI.6 A.REI.11 A.REI.12	Lesson Assessments Mid Chapter Quiz End of Chapter Quiz End of Chapter Test
Chapter 7 (16-20 days)	**EXPONENTS AND EXPONENTIAL FUNCTIONS** ● **Students will learn to represent numbers using negative exponents** ● **Students will define and use zero and negative exponents**	Lesson 7-1 to 7-8	ALGEBRA 1 COMMON CORE PEARSON (scientific calculator)	compound interest, decay factor, exponential decay, exponential function, exponential growth, geometric sequence,	N.RN.1 N.RN.2 A.SSE.1.b A.SSE.3.c A.CED.2	Lesson Assessments Mid Chapter Quiz End of Chapter Quiz End of Chapter Test

	● Stduetns will learn the rules for multiplying owers ● Students will learn the rules for dividing powers ● Exponential functions may show growth or decay				growth factor	A.CED.3 A.REI.11 F.IF.4 F.IF.5 F.IF.7.e F.IF.8.b F.IF.9 F.BF3 F.LE.1.c F.LE.2 F.LE.5	
Chapter 8 (16-20 days)	**POLYNOMIALS AND FACTORING** ● **Students will add and subtract polynomial expressions** ● **Students will multiply polynomial expressions** ● **Students will factor polynomials** ● **Students will use the Commutative and Associative Properties to manipulate polynomial expressions** ● **Students will use the Distributive Property to multiply polynomials and factor polynomials**	Lesson 8-1 to 8-8	ALGEBRA 1 COMMON CORE PEARSON (scientific calculator)		binomial degree of a monomial degree of a polynomial difference of two squares factoring by grouping monomial perfect-square trinomial polynomial polynomial standard form Trinomial	A.SSE..a A.SSE.1.b A.SSE.2 A.APR.1	Lesson Assessments Mid Chapter Quiz End of Chapter Quiz End of Chapter Test
Chapter 9 (16-20 days)	**QUADRATIC FUNCTIONS AND EQUATIONS** ● **Students will graph quadratic functions on the coordinate plane** ● **Students will use the discriminant of a quadratic equation to analyze the number of times a function crosses the x-axis** ● **Students will solve quadratic equations by graphing**	Lesson 9-1 to 9-8	ALGEBRA 1 COMMON CORE PEARSON (scientific calculator)		axis of symmetry completing the square discriminant maximum minimum parabola quadratic equation quadratic formula quadratic function root of an equation	A.APR.3 A.CED.1 A.CED.2 A.CED.3 A.CED.4 F.IF.4 F.IF.5 F.IF.7.a F.IF.7.b F.IF.8	Lesson Assessments Mid Chapter Quiz End of Chapter Quiz End of Chapter Test

					vertex	F.IF.9 F.BF.3 F.LE1.b F.LE.2 F.LE. S.ID.6.a	
	● Students will solve quadratic equations by factoring ● Students will solve quadratic equations by completing the square ● Students will solve quadratic equations by using the quadratic formula						
Chapter 10 (16-20 days)	**RADICAL EXPRESSIONS AND EQUATIONS** ● **Students will add, subtract, multiply and divide with radicals** ● **Students will rationalize the denominators of radical expressions** ● **Students will draw graphs to examine square root functions** ● **Students will estimate values of square roots** ● **Stduetns will use inverse operations, such as squaring both sides of an equation that has a square root**	Lesson 10-1 to 10-6	ALGEBRA 1 COMMON CORE PEARSON (scientific calculator)		conditional conjugates extraneous solution hypotenuse ike radicals Pythagorean Theorem radical expression square root function trigonometric ratios	A.CED.2 A.REI.2 F.IF.7.b G.SRT.6 G.SRT.8	Lesson Assessments Mid Chapter Quiz End of Chapter Quiz End of Chapter Test
						.2 A.REI.2 F.IF.7.b G.SRT.6 G.SRT.8	