High School Weekly Lesson Plan Template Algebra 1 Yearlong Unit 1

Unit 1 *for additional curriculum information, please visit the district's resource <mark>High School Pacing Guides</mark> or Georgia's K-12 Standards	**Course Name: Algebra I** **Modeling Unit Functions**
Day 1	Standard(s):Expressions and Linear Equations (8.PAR.3 & 8.PAR.4) LT: • I can simplify linear expressions. • I can solve linear equations. • I can solve real world mathematical problems. SC: • I can combine like terms. • I can solve for one variable. • I can interpret word problems and write equations.
Day 2	Standard(s):Expressions and Linear Equations (8.PAR.3 & 8.PAR.4) LT: • I can simplify linear expressions. • I can solve linear equations. • I can solve real world mathematical problems. SC: • I can combine like terms • I can solve for one variable. • I can interpret word problems and write equations.
Day 3	Standard(s): Expressions and Linear Equations (8.PAR.3 & 8.PAR.4) LT: • I can simplify linear expressions. • I can solve linear equations. • I can solve real world mathematical problems.

	SC: ● I can combine like terms ● I can solve for one variable. ● I can interpret word problems and write equations.
Day 4	Standard(s): Expressions and Linear Equations (8.PAR.3 & 8.PAR.4) LT: ● I can simplify linear expressions. ● I can solve linear equations. ● I can solve real world mathematical problems. SC: ● I can combine like terms ● I can solve for one variable. ● I can interpret word problems and write equations.
Day 5	Standard(s): A.MM.1.1 & 4 and A.FGR.2.1 & 2 LT: ● I can use arithmetic sequences to describe patterns. ● I can identify arithmetic sequences in linear functions to describe real world phenomena. ● I can construct and interpret graphs of linear functions. SC: ● I can find the common difference. ● I can create unknown points from given points and common difference ● I can use the explicit and recursive formulas to create a linear equation from an arithmetic sequence.
Day 6	Standard(s): A.MM.1.1,4 A.FGR.2.1,2 LT: ● I can use arithmetic sequences to describe patterns. ● I can identify arithmetic sequences in linear functions to describe real world phenomena. ● I can construct and interpret graphs of linear functions.

	SC: ● I can find the common difference. ● I can create unknown points from given points and common difference ● I can use the explicit and recursive formulas to create a linear equation from an arithmetic sequence.
Day 7	Standard(s): A.MM.1.1,4 A.FGR.2.1,2 LT: ● I can use arithmetic sequences to describe patterns. ● I can identify arithmetic sequences in linear functions to describe real world phenomena. ● I can construct and interpret graphs of linear functions. SC: ● I can find the common difference. ● I can create unknown points from given points and common difference ● I can use the explicit and recursive formulas to create a linear equation from an arithmetic sequence.
Day 8	**QUIZ** Unit #1 Quiz #1 Linear Exp/Equations/Sequences (Progress Learning)
Day 9	Standard(s): A.MM.1.1,2,5 A.FGR.2.2,4 LT: ● I can read and interpret function notation in real-world applications. ● I can analyze the validity of a mathematical model in a real-world application. SC: ● I can identify function notation and differentiate it from multiplication notation ● I can identify the input value and substitute in in for x ● I can identify the input value on a graph and find the corresponding y value ● I can answer questions about mathematical models and validate the reasonableness of my choices
Day 10	Standard(s): A.MM.1.1,4 A.FGR.2.1,2,4 LT: ● I can read and interpret function notation in real-world applications. ● I can analyze the validity of a mathematical model in a real-world application. SC:

	- I can identify function notation and differentiate it from multiplication notation - I can identify the input value and substitute in in for x - I can identify the input value on a graph and find the corresponding y value - I can answer questions about mathematical models and validate the reasonableness of my choices
Day 11	Standard(s): A.MM.1.1,4 A.FGR.2.1,2,4 LT: - I can construct and interpret graphs of linear functions. - I can write an equation given a real world problem. SC: - I can graph given the slope and y-intercept - I can identify the slope and y-intercept

Day 12	Standard(s): 8.FGR.5 D
	LT:
	- I can construct and interpret graphs of linear functions.
	- I can write an equation given a real world problem.
	
	SC:
	- I can identify key features of linear functions
	    ○ Intercepts
	    ○ Slope
	    ○ Positive
	    ○ Negative
	    ○ Domain
	    ○ Range
	    ○ End Behavior

Day 13	Standard(s): 8.FGR.5 D LT: - I can construct and interpret graphs of linear functions. - I can write an equation given a real world problem.

	SC:
	    ● I can graph given the slope and y-intercept
	    ● I can identify the slope and y-intercept

Day 14	Standard(s): 8.FGR.5 D
	LT:
	    ● I can construct and interpret graphs of linear functions.
	    ● I can write an equation given a real world problem.
	SC:
	    ● I can identify key features of linear functions
	        ○ Intercepts
	        ○ Slope
	        ○ Positive
	        ○ Negative
	        ○ Domain
	        ○ Range
	        ○ End Behavior

Day 15	Standard(s): A.MM.1.1,2,4,5 and A.FGR,2.2,3,4
	LT:
	    ● I can construct and interpret graphs of linear functions
	    ● I can use function notation to build and evaluate linear functions
	    ● I can determine appropriate domain and range values given a context
	SC:
	
	    ● I can identify key features of linear functions
	        ○ Intercepts
	        ○ Slope
	        ○ Positive
	        ○ Negative
	        ○ Domain
	        ○ Range
	        ○ End Behavior

Day 16	Standard(s): A.MM.1.1,2,4,5 and A.FGR,2.2,3,4
	LT:
	• I can construct and interpret graphs of linear functions
	• I can use function notation to build and evaluate linear functions
	• I can determine appropriate domain and range values given a context
	SC:
	• I can identify key features of linear functions
	    ° Intercepts
	    ° Slope
	    ° Positive
	    ° Negative
	    ° Domain
	    ° Range
	    ° End Behavior

Day 17	Standard(s): A.MM.1.1,2,4,5 and A.FGR,2.2,3,4
	LT:
	• I can construct and interpret graphs of linear functions
	• I can use function notation to build and evaluate linear functions
	• I can determine appropriate domain and range values given a context
	SC:
	• I can identify key features of linear functions
	    ° Intercepts
	    ° Slope
	    ° Positive
	    ° Negative
	    ° Domain
	    ° Range
	    ° End Behavior

Day 18	**QUIZ** Unit #1 Quiz #2 Linear Functions (Progress Learning)
Day 19	Standard(s): A.MM.1.1,2,4,5 and A.FGR.2.2,3,4 LT: • I can look at various functions in context and determine the appropriate domain and range. SC:

	● I can identify appropriate domain and range values given a context. ● I can use set notation to describe the domain and range values of linear functions.
Day 20	Standard(s): A.MM.1.1,2,4,5 and A.FGR.2.2,3,4 LT: ● I can look at various functions in context and determine the appropriate domain and range. SC: ● I can identify appropriate domain and range values given a context. ● I can use set notation to describe the domain and range values of linear functions.
Day 21	Standard(s): A.MM.1.1 and A.FGR.2.5 LT: ● I can look at patterns and discover the patterns that nonlinear functions create. SC: ● Students will formally and informally describe the patterns. ● Students explore **quadratic**, exponential, absolute value, square root, and cube root parent functions
Day 22	Standard(s): A.MM.1.1 and A.FGR.2.5 LT: ● I can look at patterns and discover the patterns that nonlinear functions create. SC: ● Students will formally and informally describe the patterns. ● Students explore quadratic, exponential, absolute value, square root, and cube root parent functions
Day 23	Standard(s): A.MM.1.1 and A.FGR.2.5 LT: ● I can look at patterns and discover the patterns that nonlinear functions create. SC: ● Students will formally and informally describe the patterns. ● Students explore quadratic, exponential, absolute value, square root, and cube root parent functions
Day 24	Review for Test

	Standard(s): All Unit 1 Standards
Day 25	Test Unit #1 Test Linear Functions/Sequences/Function Fams (Progress Learning) Standard(s): All Unit 1 Standards