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 3-5	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 6-14	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 15	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 16	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 17	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 18	**QUIZ** Unit #1 Quiz #1 Linear Exp/Equations/Sequences (Progress Learning)

Day 19	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 20	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 21	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 22	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 23	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 24	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 25	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 26	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 27	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 28	**QUIZ** Unit #1 Quiz #2 Linear Functions (Progress Learning)
Day 29	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 30	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 31	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 32	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 33	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 34	Review for Test

	Standard(s): All Unit 1 Standards
Day 35	Test Unit #1 Test Linear Functions/Sequences/Function Fams (Progress Learning) Standard(s): All Unit 1 Standards