**ARC Week at Glance**

**-Subject: Mathematics Course: Algebra: Concepts & Connections Grade:** **9th – 12th Date: 9/2/2025**

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| **Standard(s):** A.FGR.2.2: Construct and interpret the graph of a linear function that models real-life phenomena and represent key characteristics of the graph using formal notation.  A.FGR.2.3: Relate the domain and range of a linear function to its graph and, where applicable, to the quantitative relationship it describes. Use formal interval and set notation to describe the domain and range of linear functions.  A.FGR.2.4: Use function notation to build and evaluate linear functions for inputs in their domains and interpret statements that use function notation in terms of a mathematical framework.  A.FGR.2.5: Analyze the difference between linear functions and nonlinear functions by informally analyzing the graphs of various parent functions (linear, quadratic, exponential, absolute value, square root, and cube root parent curves).  **Assessment(s):  Quiz  Unit Test  Project  Lab  None** | | | |
|  | **Learning Target**  **(I am learning about…)** | **Success Criteria**  **(I can….)** | **Lesson/Activities of the Day** | **Assignments/Formative Assessment** |
| **Monday** | I am learning to construct and interpret the graph of a linear function  I am learning to use function notation to build and evaluate linear functions and interpret statements using function notation (using a function, graph and table) | I can construct and interpret the graph of a linear function  I can use function notation to evaluate linear functions and interpret statements using function notation (using a function, graph and table) | Engage: Students will view the board with different representations of the same linear function. Students will then participate in “What I Know, What I Notice and What I Wonder. Students will then discuss with their partners and the class  Explore: Students will explore how to graph linear functions using a table and using slope – intercept form  Explain: Teacher will explain how to graph linear functions with a table and using slope intercept form  Elaborate: Teacher will discuss in which situation a particular method would be best utilized to graph a linear function  Evaluate: Teacher will provide a classwork assignment over graphing linear functions | Classwork Assignment over Graphing Linear Functions |
| **Tuesday** | I am learning to construct and interpret the graph of a linear function  I am learning to use function notation to build and evaluate linear functions and interpret statements using function notation (using a function, graph and table) | I can construct and interpret the graph of a linear function  I can use function notation to evaluate linear functions and interpret statements using function notation (using a function, graph and table) | Engage: Teacher will provide warm-up problems discussing graphing linear functions  Explore: Students will explore the domain and range of a function  Explain: Teacher will explain formal interval and set notation to describe the domain and range  Elaborate: Teacher will present various sets of and subsets of real numbers for the students to use in explaining the domain and range of a linear function  Evaluate: Teacher will provide a TOTD over domain and range | TOTD over Domain and Range using Interval and Set Notation |
| **Wednesday** | I am learning to construct and interpret the graph of a linear function  I am learning to use function notation to build and evaluate linear functions and interpret statements using function notation (using a function, graph and table) | I can construct and interpret the graph of a linear function  I can use function notation to evaluate linear functions and interpret statements using function notation (using a function, graph and table) | Engage: Teacher will provide a retrieval quiz over function notation and graphing linear functions  Explore: Students will explore making inferences from a scenario that consist of a linear function in the form of an algebraic function, table and/or graph.  Explain: Teacher will explain how to make inferences using function notation and relating it to the domain and the range of the linear function using intervals and set notation  Elaborate: Students will be provided a classwork assignment over making inferences using function notation and relating it to the domain and the range of the linear function using intervals and set notation  Evaluate: Students will be provided classwork assignments over making inferences from linear graphs and tables using function notation and relating the domain and range using intervals and set notation. (Small Group and 1 on 1 time will be provided for the students) | Classwork Assignment over Making Inferences from Linear Graphs and Tables using Function Notation and Domain and Range |
| **Thursday** | I am learning to construct and interpret the graph of a linear function  I am learning to use function notation to build and evaluate linear functions and interpret statements using function notation (using a function, graph and table) | I can construct and interpret the graph of a linear function  I can use function notation to evaluate linear functions and interpret statements using function notation (using a function, graph and table) | Engage: Teacher will provide a retrieval quiz over function notation and graphing linear functions  Explore: Students will explore making inferences from a scenario that consist of a linear function in the form of an algebraic function, table and/or graph.  Explain: Teacher will explain how to make inferences using function notation and relating it to the domain and the range of the linear function using intervals and set notation  Elaborate: Students will be provided a classwork assignment over making inferences using function notation and relating it to the domain and the range of the linear function using intervals and set notation  Evaluate: Students will be provided classwork assignments over making inferences from linear graphs and tables using function notation and relating the domain and range using intervals and set notation. (Small Group and 1 on 1 time will be provided for the students) | Classwork Assignment over Making Inferences from Linear Graphs and Tables using Function Notation and Domain and Range |
| **Friday** | I am learning to construct and interpret the graph of a linear function  I am learning to use function notation to build and evaluate linear functions and interpret statements using function notation (using a function, graph and table) | I can construct and interpret the graph of a linear function  I can use function notation to evaluate linear functions and interpret statements using function notation (using a function, graph and table) | Assessment over Making Inferences from Linear Graphs and Tables using Function Notation and Domain and Range | Formative Assessment over Function Notation Statements and Linear and Nonlinear Functions |

**\*** Exit Ticket/Final Stretch Check  Electronic Tools  Dry Erase Boards – quick checks  Turn & Talk Discussion (verbal responses)  Teacher Observation – document Clipboard

Quick Write/Draw  Annotation  Extended Writing  Socratic Seminar  Jigsaw  Thinking Maps  Worked Examples  Other :\_\_\_\_\_\_\_\_\_\_\_