**ARC Week at Glance**

**-Subject: Mathematics Course: Algebra Grade:**  **9-12 Date: 8/8/2025**

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| **Standard(s):** **A.MM.1: Apply mathematics to real-life situations; model real-life phenomena using mathematics.** * **A.MM.1.1: Explain applicable, mathematical problems using a mathematical model.**
* **A.MM.1.2: Create mathematical models to explain phenomena that exist in the natural sciences, social sciences, liberal arts, fine and performing arts, and/or humanities domains. A.MM.1.5: Define appropriate quantities for the purpose of descriptive modeling.**

**A.FGR.2: Construct and interpret arithmetic sequences as functions, algebraically and graphically, to model and explain real-life phenomena. Use formal notation to represent linear functions and the key characteristics of graphs of linear functions, and informally compare linear and nonlinear functions using parent graphs.** * **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.2.4: 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.**

**quantity represented by the expression. Assessment(s):** [x]  **Quiz** [ ]  **Unit Test** [ ]  **Project** [ ]  **Lab** [ ]  **None** |
|  | **Learning Target****(I am learning about…)** | **Success Criteria****(I can….)** | **Lesson/Activities of the Day** | **Literacy Tasks/Focus** |
| **Monday** |  |  | Teacher Pre-Planning | Click or tap here to enter text. |
| **Tuesday** | I am learning the expectations of the classroom.I am learning the expectations of the course.  | I can identify the expectations of the classroom and the course.  | **Bell Work:** Getting to Know Me Activity**Mini-Lesson:** Review classroom expectations and course syllabus.  | Students will use math terminology to evaluate expression using the order of operation.  |
| **Wednesday** | I am learning how to translate verbal phrases into algebraic expressions, identify variables, constants, and coefficients, evaluate expressions for given values of variables, and apply expressions to solve real-world problems. (Pre-Algebra Review) | I can translate verbal phrases into algebraic expressions, identify variables, constants, and coefficients, evaluate expressions for given values of variables, and apply expressions to solve real-world problems. (Pre-Algebra Review) | **Warm-Up:**What does it mean you it is stated that something is “steep”?**Mini-Lesson:** * Define slope: slope = $\frac{rise}{run}$
* Explain positive, negative, zero, and undefined slopes.
* Show how to calculate slope from:
	+ A graph
	+ A table
	+ Two coordinate points

**Guided Practice** * Work through 3–4 examples together.

**Independent Practice** * Students complete a worksheet with a mix of graph-based and point-based slope problems.

**Exit Ticket** * One quick problem: “Find the slope between (2, 3) and (6, 7).”
 | Students will use math terminology to translate and evaluate expressions.  |
| **Thursday** | I am learning how to read and interpret function notation in real-world applications. I am learning how to analyze the validity of a mathematical model in a real-world application. | 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. | **Bell Work:** Exploring Growth Rates Diagnostic Assessment/Activity **Engage:** Compare the weights of Baby Circle and Baby Star (The student will answer the following questions using the information from graph)* At birth, how much did each baby weight?
* At two months, how much did each baby weight?
* At what month did the Baby Star weigh more than Baby Circle?

**Explore:** Using the information form the graph, students will name the function that relates to the weight of each baby using function notation.  F(t)  | Students will use math terminology to read and interpret real-world applications. |
| **Friday** | I am learning how to identify the function values as an ordered pair.I am learning how to identify the rate of change using the equation y = mx + b.I am learning how to create a graph for a linear function.  | I can identify the function values as an ordered pair.I can identify the rate of change using the equation y = mx + b.I can create a graph for a linear function.  | **Bell Work: Syllabus Assessment (Canvas)** **Apply:** Using the information from the graph, students will answer questions related to identifying the function values as ordered pair, identifying the rate of change using the equation y = mx + b, and creating a graph for the linear function. **Exit Ticket:** Exploring Growth Rates Formative Assessment | Students will use math terminology to read and interpret real-world applications. |

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

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