**ARC Week at Glance**

**-Subject: Mathematics Course: Algebra Grade:**  **9-12 Date: 9/2/2025**

|  |  |  |  |
| --- | --- | --- | --- |
| **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.2.3 – 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.**   **quantity represented by the expression. Assessment(s):  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** |  |  | Labor Day (School Closed) | Click or tap here to enter text. |
| **Tuesday** | I am learning how to use arithmetic sequences to describe patterns.  I am learning how to identify arithmetic sequences in linear functions to describe real world phenomena.  I am learning how to construct and interpret graphs of linear functions. | 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. | Opening: Diagnostic Assessment/Activity   * Exploring Patterns   Mini-Lesson: Art Design   * Students will observe two different designs and determine how each design change over different stages.   Collaboration: (Work in pairs)   * Students will work in pairs to complete the Identifying and Predicting Patterns Activity. | Click or tap here to enter text. |
| **Wednesday** | I am learning how to use arithmetic sequences to describe patterns.  I am learning how to identify arithmetic sequences in linear functions to describe real world phenomena.  I am learning how to construct and interpret graphs of linear functions. | 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. | Opening: Review answers from the collaboration activity.  Mini-Lesson: Students will discover the two different types of arithmetic sequences.   * Explicit * Recursive (   Independent Activity: Students will work independently on the activity “Ticket Sales”, where they will complete a table based on what they observe and identify the relationship between the items on the table. | Students will use math terminology to describe patterns using arithmetic sequences. |
| **Thursday** | I am learning how to use arithmetic sequences to describe patterns.  I am learning how to identify arithmetic sequences in linear functions to describe real world phenomena.  I am learning how to construct and interpret graphs of linear functions. | 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. | Mini-Lesson: Students will continue working independently on the activity “Ticket Sales”, where they will complete a table based on what they observe and identify the relationship between the items on the table.  TOTD: Formative Assessment   * Write an explicit sequence based off sequence. * Write a recursive formula based off sequence. * Create a linear function based off the sequence. | Students will use math terminology to describe patterns using arithmetic sequences. |
| **Friday** | I am learning how to use arithmetic sequences to describe patterns.  I am learning how to identify arithmetic sequences in linear functions to describe real world phenomena.  I am learning how to construct and interpret graphs of linear functions. | 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. | Students will complete a Arithmetic Sequence practice in Progress Learning. | Students will use math terminology to describe patterns using arithmetic sequences. |

**\*** 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 :\_\_\_\_\_\_\_\_\_\_\_