**ARC Week at Glance**

**Subject: Math Course: Advanced Algebra Concepts & Connections Grade: 9th – 12th Dates: 3/3 to 3/7**

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| **Standard(s):**  AA.PAR.6.1 Use matrices to represent data, and perform mathematical operations with matrices and scalars, demonstrating that some properties of real numbers hold for matrices, but that others do not.  AA.PAR.6.2 Rewrite a system of linear equations using a matrix representation.  AA.PAR.6.3 Use the inverse of an invertible matrix to solve systems of linear equations.  MA2A9. Students will understand and apply matrix representations of vertex-edge graphs.  **Assessment(s):  Quiz  Unit Test  Project  Lab** | | | | | | |
|  | **Learning Target**  **(I am learning about…)** | **Criteria for Success**  **(I can…)** | **Opening**  *(10 - 15 Mins)* | **Work-Session**  *(20 - 25 mins)* | **Closing**  *(5 - 10 mins)* | **Literacy Tasks/Focus** |
| *(Include at least one/two formatives\*in any part of the lesson as needed)* | | |
| **Monday** | I am learning how to solve problems using matrices. | I can find the area of triangles and solve applications using matrices. | #’s 1 – 2 with teacher guidance on Problem Solving & Matrix Applications with Systems of Equations | #’s 3 – 6 with partner on Problem Solving & Matrix Applications with Systems of Equations | McDougal Littell  Practice 4.3B- finish for homework! | Given verbal scenarios, write and solve a linear system for two or three unknowns. |
| **Tuesday** | I am learning how to solve problems using matrices. | All Above | #’s 14 – 15 on Practice & Review on Properties and Solving Systems of Equations with Matrices | #’s 1 – 13 on Practice & Review on Properties and Solving Systems of Equations with Matrices  \*Formative | Check and display classwork | Given verbal scenarios, write and solve a linear system for two or three unknowns. |
| **Wednesday** | I am learning how to solve problems using matrices. | All Above | Quick Study/Review | Quiz on Properties and Solving Systems of Equations with Matrices  \*Summative |  | Given verbal scenarios, write and solve a linear system for two or three unknowns. |
| **Thursday** | I am learning about vertex edge graphs (diagraphs). | I can construct digraphs and matrices to model one, two and three stage events in the real-world setting. | Read page 1 on “The Okefenokee Food Web” Digraphs Task and construct a matrix to model the food web in this ecosystem. | Complete #’s 2 – 7 on “The Okefenokee Food Web” Digraphs Task with guidance and sharing | Complete # 8 on  “The Okefenokee Food Web” Digraphs Task | #8- Organize and summarize your findings for a report on the use of insecticide in this ecosystem. |
| **Friday** | I am learning about vertex edge graphs (diagraphs). | I can construct digraphs and matrices to model one, two and three stage events in the real-world setting. | Complete the “Secret Sharing” on Digraphs Task then Turn & Talk | Exercise Set B (page 62 Georgia High School Mathematics) | Share vertex-edge graphs for #’s 10 – 12 on Exercise Set B | Explain why you drew your digraph the way you did. What can it tell you? |

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