**ARC Week at Glance**

**Subject: Math Course: Advanced Algebra Concepts & Connections Grade: 9th – 12th Dates: 10/28 to 11/1**

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| **Standard(s):**  AA.FGR.3.3 Use the definition of a logarithm, logarithmic properties, and the inverse relationship between exponential and logarithmic functions to solve problems in context.  AA.FGR.3.4 Create exponential equations and use logarithms to solve contextual problems for which only one variable is unknown.  AA.FGR.3.5 Create and interpret logarithmic equations in one variable and use them to solve problems.  **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 about exponential growth & decay functions in real-life | I can choose and use the appropriate formula to solve real -life exponential applications. | I can precheck Which Job? Projects while you take the quiz and conference with you after quiz if desired. | Quiz on Applications with Exponential Growth & Decay | See Opening | Which job should you choose? Why? Is the salary better over the ENTIRE time period? If not, for how many years? |
| **Tuesday** | **PSAT** |  |  |  |  |  |
| **Wednesday** | I am learning about logarithms. | I can re-express exponential expressions in log form. | Complete **Introducing Logarithms** Part 1  Which Job? Project is due Friday! | Complete Part II on **Introducing Logarithms** with teacher modeling and guidance | Complete Part III on **Introducing Logarithms** | What does inverse mean? Give examples of inverse operations or actions. |
| **Thursday** | I am learning about logarithms. | I can evaluate log expressions without using a calculator. | Complete Part I **Sorting Cards Activity** on **“What Is a Logarithm- Spotlight Task?”** | Complete Part II on “**What Is a Logarithm- Spotlight Task**?” | **Quick Quiz** on Evaluating Logarithms  \*Formative | Reflect on Formative- what do you know and what do you need to know? |
| **Friday** | I am learning about properties of exponents and logarithms. | I can evaluate log expressions using technology/calculator. | **Quick Quiz** on Evaluating Logarithms  \*Summative | Complete Part III on “**What Is a Logarithm- Spotlight Task**?” | Complete Part IV on “**What Is a Logarithm- Spotlight Task**?” | What is the change of base formula? How do we apply it? |

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