**ARC Week at Glance**

**Subject: Math Course: Advanced Algebra Concepts & Connections Grade: 10th – 12th Dates: 9/9 to 9/13**

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| **Standard(s):**  AA.DSR.2.4: Calculate and interpret z-scores as a measure of relative standing and as a method of standardizing units. AA.DSR.2.5: Given a normally distributed population, estimate percentages using the Empirical Rule, z-scores, and technologyAA.DSR.2.7: Given a margin of error, develop and compare confidence intervals of different models to make conclusions about reliability. AA.MM.1.1: Explain applicable, mathematical problems using a mathematical model. AA.MM.1.3: Using abstract and quantitative reasoning, make decisions about information and data from a mathematically applicable situation. AA.MM.1.4: Use various mathematical representations and structures to represent and solve real-life problems.  **Assessment(s):  Quiz  Unit Test  Project  Lab  None** | | | | | | |
|  | **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 Normal distributions and z-scores | I can calculate z-scores and determine the percentile data fall into. | Part I on Practice with Normal Distributions & Z-Scores with teacher guidance | Part II on Practice with Normal Distributions & Z-Scores  \*formative | Compare Part II with partner, share, then check | What do you know? What do you need to know? |
| **Tuesday** | I am learning about Normal distributions and z-scores | I can calculate z-scores and determine the percentile data fall into. | Study, Quick Q&A | Quiz on Normal Distributions & Z-Scores |  |  |
| **Wednesday** | I am learning about confidence intervals | I can conduct statistical analyses included in studies to determine the confidence intervals of different models to make conclusions about the reliability of the data. | “Do You Have Confidence” Diagnostic Assessment | Watch video clips of The Price is Right’s “Range Game” in which the contestant is trying to guess the price of a prize, within a given range. | Complete the Range Game ILP then share with a partner | Interpret real-life confidence intervals and explain what they mean. |
| **Thursday** | I am learning about confidence intervals | I can critically evaluate confidence intervals to answer a statistical investigative question | “Which One Doesn’t Belong? | The Confidence Game ILP | Display the answers for each of the 10 questions from the handout the students write the total number of “correct” responses Engage the students in a discussion about how well they did at estimating the true values with their intervals. | Class brainstorm about what it means to “estimate” something. Students come up with possible synonyms for the word “estimate.” |
| **Friday** | I am learning how to construct confidence intervals. | I can calculate a confidence interval and margin of error for a population proportion or mean | HMH (GA) Lesson 16.1 Practice Workbook page 247 | HMH (GA) Lesson 16.1 Practice Workbook page 248 Example 2 | HMH (GA) Lesson 16.1  Page 249 #’s 1 – 6 | What part of our calculations account for the margin of error? |

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