Names:

Accelerated Reader
Worksheet

Introduction: You and your team are going to craft your own reading goals, and determine what it takes to become a "reading millionaire!" In a group of 2 – 3, brainstorm all the information you might need, and that you think you can find through research (remember, you can conduct surveys!) or experimentation. Using this information, create a model to set and justify your reading goals. Once you have a model, you will share it with your class. Your model should consider your reading speed and the time you spend reading; remember to consider school holidays and other upcoming events which might affect your reading time! Your solution should include a sensible estimate of your reading speed, as well as your goals for the week, year, etc.

Define the Problem: Before you can start planning your approach, you need to be specific about what you're measuring so that you can justify your design.

1. What kind of information do you need to know to make a model? _____
   _____
   _____
   _____

2. What are some important quantities? Are they quantities which are required by the model, or quantities which are provided by the model? _____
   _____
   _____
   _____

3. How can you get this information? What kinds of data can you gather? _____
   _____
   _____
   _____

4. Does each quantity have only one value, or can it have a range of values? _____
   _____
   _____
   _____

This lesson was developed by Emily Lane, Jody Britten, Marka Carson, Misael Jimenez, Erika Villegas-Jimenez, Laura Pahler, Maurice Cuevas, Diane Hubbard-Knight, and Kristina Sandberg
Grant STEM-C-1441024
Last Edited Date: 6/19/17

5. What mathematical tools could you use in your model? _____
   _____
   _____
   _____

Gather Information: Now that you know what information you're looking for and how you'll use it to help determine your goals, you need to collect that information. Record data on your reading speed, and the time you spend reading, to gather the information you'll need in your model. Write it down.

Do the Math: Take the information you've gathered and use your mathematical tools to create a mathematical model of your reading habits. Justify your numerical values, estimations, and decisions. Show all your work.

Reflection: It's almost time to show everybody your goals! During your presentation, you should focus on the process you used to create your model. Your data, weekly plans, and yearly plans are important, but reflect on these questions before your presentation to help you justify your model. Remember to explain why the decisions you made were reasonable!

1. Is your solution reasonable? Why or why not? _____
   _____
   _____
   _____

2. Is your solution useful for answering your question? _____
   _____
   _____
   _____

3. Why would you recommend your model to someone? _____
   _____
   _____
   _____

4. What mathematical tools did you use, and how did they help solve the problem? _____
   _____
   _____
   _____

5. What did you change in your model throughout the modeling process? _____
   _____
   _____
   _____

6. Are there situations where your solution wouldn't work or your model wouldn't apply? __
   _____
   _____
   _____

7. How would you need to change your model to apply to more situations? _____
   _____
   _____
   _____

8. If you had more time, what else would you do? _____
_____
_____
_____

9. Are there any mathematical tools or pieces of information that would have been helpful to have? _____
_____
_____
_____

Presentation: When it's your turn, show your class your goals. If your teacher has a rubric, check to see how to make your presentation better. Don't forget to explain why you did what you did!