

POOL WATER PROBLEM

Grade Level and Course: 9th grade Algebra 1

Time Frame: 30 minutes

Content Objectives:

- Students will be able to describe, interpret, and analyze graphs from a given context.

Language Objectives:

- Vocabulary: interpret, faster/slower rate, increase, decrease, steeper,
- Students will be able to recognize characteristics of a good written explanation.
- Students will be able to describe and interpret the graph verbally.

Materials:

- Pool Water Problem Handout
- Graph paper
- Poster Paper

Individual Work:

- Introduce students to the prompt. Be sure that all students understand the prompt. Have a student read the prompt out loud. Give students 5 minutes to work on the prompt on their own. Tell students to give others a chance to work on the prompt when they are finished and to work on how to explain why they chose that particular answer.

Whole-Class Discussion:

- Go over the answer as a class. Ask students which answer they chose. Have a discussion on why they chose this particular answer. What about the graph told them that this story was a match?
- During this discussion, write key vocabulary words that students use on a sheet of poster paper. Have students generate different ways to explain each vocabulary word.
- After the whole-class discussion, have students generate a graph for Choice B. Give students a piece of graph paper each to complete this task. Using the same piece of poster paper, ask students how they were able to draw the graph. Ask a student who was able to complete this task to share their answer and show this graph on the board. If not, discuss this task as a class and complete it together.

Closure:

- Collect students' work. Let students know that they will be interpreting graphs and using the vocabulary tomorrow