## PHYSICS INMOTION gpb.org/physics-motion

### Main Ideas, Key Points, Questions:

After watching the video segment, write down key points, main ideas, and big questions.

**Graphing Relationships** 

Unit 1G

Note-Taking Guide and Questions to Consider Date:

#### **Objective(s):**

Notes:

• Determine how to create a line graph from an experiment, including where and how to label axes, correctly scale and number axes, plot points, and create line of best fit.

During the video segment, use words, phrases, or

• Calculate the slope of the line of best fit for a data set in order to form conclusions.

drawings to take notes.



Summary:

After watching the video segment, write at least three sentences explaining what you learned. You may ask yourself: "If I was going to explain this to someone else, what would I say?"



# **Graphing Relationships**

Note-Taking Guide and Questions to Consider Date:

Name:

1. What is the variable that is manipulated by the experimenter during an experiment called?

Unit 1G

2. On the diagram below, label the axes where the independent and dependent variables would be located.

3. If you were given the following graph, identify the independent and dependent variables.



- 4. In addition to the title on the axis, what else must be included so that someone knows how to interpret the graph?
- 5. In the slope-intercept form of a line, y=mx+b, which variable is the slope?



### Unit 1G Graphing Relationships

Note-Taking Guide and Questions to Consider Date:

Name:

#### Answer the following.

- 6. What is the equation for the slope of a line?
- 7. On the diagram below, sketch an inversely proportional graph.

8. On the diagram below, sketch an exponentially proportional graph.