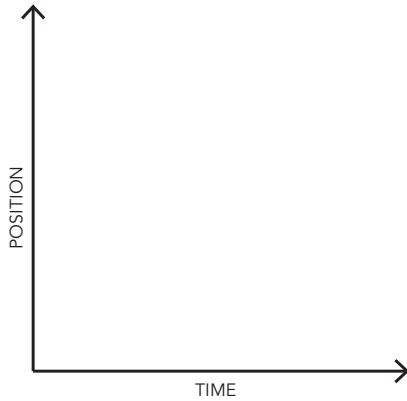


BUGGY LAB WORKSHEET

Question: Is speed a proportional relationship?

Predict how you think the graph of the speed of the car will look.

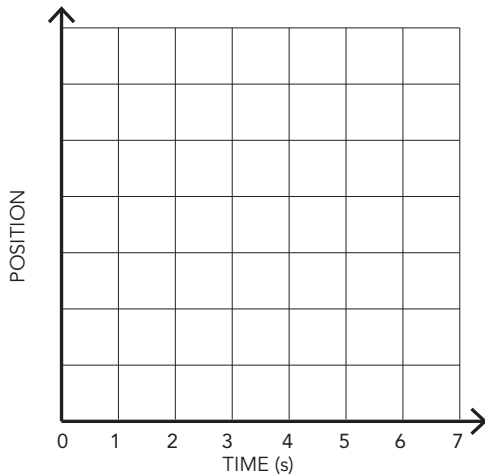


Record your Buggy data below.

Position	Time (s)

Graphing

1. Create a graph.
2. Draw a line of best fit for your data set.
3. Calculate the slope of the line. _____



LESSON 2

Analysis Questions

Refer to your graphs from the previous page to answer the following questions:

1. Do your data points fall in a somewhat-straight line? YES / NO
2. What physical quantity is represented by the slope of the line?

3. Is the speed of the car constant or not constant? _____ How do you know?

4. How would you recognize a graph of an object traveling at a constant speed?

5. What do you notice about the shape of your graph? (Is it similar to graphs from perfect Purple Paint, or different? Explain).

UNIT RATE ASSIGNMENT

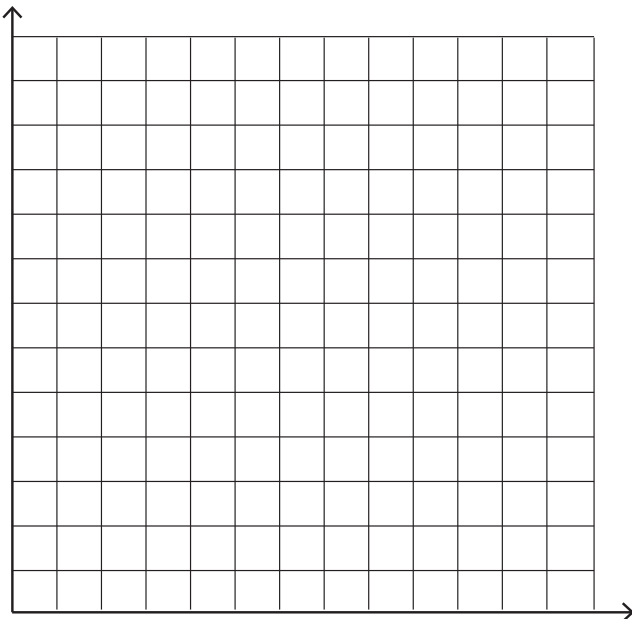
<https://www.khanacademy.org/math/cc-eighth-grade-math/cc-8th-linear-equations-functions/cc-8th-graphing-prop-rel/v/graphing-proportional-relationships-example>

1. For every 1 unit change in x there is a corresponding change of 0.6 units in y .

a. Fill in the chart

X	Y

b. Graph the relationship.



LESSON 2

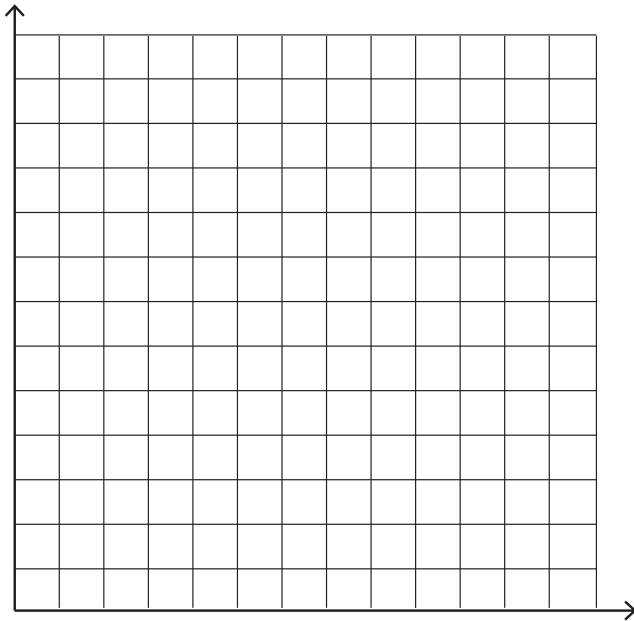
- c. What is the unit rate of change? What is the difference between slope and unit rate?

2. In the proportional relationship between c and d , every increase of 2 units in c corresponds to an increase in 5 units of d .

- a. Fill in the chart

X	Y

b. Graph the relationship



c. What is the unit rate of change (a change in 1 unit of c corresponds to how many units in d)? What is the difference between slope and unit rate?