

## Graph Preparation and Interpretation Questions:

1. What did we quantify – what did we measure or count?

(a)

(b)

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2. Identify the dependent and independent variables by considering these questions:

Does the (a) \_\_\_\_\_ depend on the (b) \_\_\_\_\_?

Or does the (b) \_\_\_\_\_ depend on the (a) \_\_\_\_\_?

The independent variable is the \_\_\_\_\_, and the dependent variable \_\_\_\_\_ . Typically, the independent variable is graphed on the  $x$ -axis, and the dependent variable is graphed on the  $y$ -axis.

3. Label the axes accordingly, adding appropriate units.

4. Choose an appropriate scale for each variable by considering the following:

What is the range of the (a) \_\_\_\_\_?

From \_\_\_\_\_ to \_\_\_\_\_.

After you find the range of this data, count how many graph squares are on the corresponding axis, and choose an appropriate scale for that axis. Scale: \_\_\_\_\_

What is the range of the (b) \_\_\_\_\_?

From \_\_\_\_\_ to \_\_\_\_\_.

After you find the range of this data, count how many graph squares are on the corresponding axis, and choose an appropriate scale for that axis. Scale: \_\_\_\_\_

5. Plot your data points.

6. After you graph the data, answer the following questions:

What are the units of the slope? Express as a rate. \_\_\_\_\_

What is the meaning of the slope? Express in words.

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What is the slope of the line? \_\_\_\_\_

What is the y-intercept? \_\_\_\_\_

What is the meaning of the y-intercept? Express in words.

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