

Name: _____

Period: _____

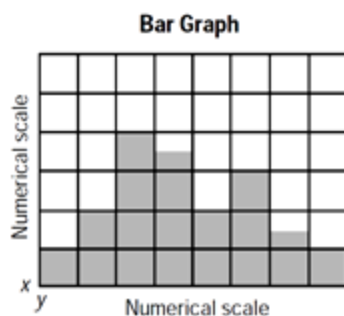
Bess Beetles

Science Skill 3: Graphing

BACKGROUND

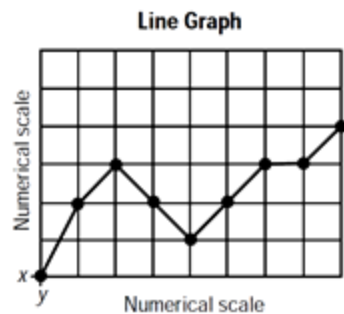
A graph is a pictorial representation of information recorded in a data table. It is used to show a relationship between two or more different factors. We must always keep in mind how can we best represent the data from our experiments to make analysis and sharing of data more transparent and efficient.

TYPES OF GRAPHS



Line Graphs

The type of graph that best shows the relationship between two variables is a line graph. A line graph has one or more lines connecting a series of points. Along the horizontal, or X-axis, is the independent variable. The independent variable is the manipulated variable. In other words, the independent variable is the one that YOU changed or manipulated in the experiment. Along the vertical, or Y-axis, is the dependent variable which is the variable that you measured as a result in your experiment.



Bar Graphs

A bar graph is another way of showing relationships between variables. A bar graph also contains an X and Y-axis. Instead of points, however, a bar graph uses a series of columns to display data. On some bar graphs, the X-axis has labels rather than a numerical scale. This type of a graph is only used to show comparisons.

GRAPH ESSENTIALS

1. Descriptive title
2. X-axis label and units (independent variable)
3. Y-axis label and units (dependent variable)
4. Scaling

APPLICATION

1. Which type of graph would best represent the data from the Bess Beetle lab?

2. What variable should be placed on the X-axis?

3. Which variable should be placed on the Y-axis?

4. Why is it important to graph the class data versus your own data?

Using your response to the questions above and the class beetle data, create a graph including all four graph essentials.

SEE CLASS DATA

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