

Key

VOCABULARY

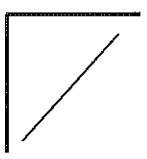
Bar Graph: uses bars to represent data. Usually used to compare different objects

Line Graph: uses points connected by line segments. Usually used to show how something changes over time or how one variable changes in response to another.

- Positive slope: as one variable increases, the other increases as well



- Negative slope: as one variable increases, the other decreases



Pie Chart/Circle Graph: parts of a whole are represented as "slices" of a pie. Usually shows percentage or fraction data.

Scatter Plot: a graph of two-variable data. Used to show relationships between two variables

Variable: a value that can change

Constructing BAR Graphs

1. Organize data in a table.
2. Draw horizontal & vertical axes on graph paper
3. Place MANIPULATED variable on X-axis & RESPONDING variable on Y-axis. LABEL the axes.
4. Determine the Scale to be used for the measurements. All squares on the graph paper must have the same value.
5. Use an equal number of squares for the width of each bar on the graph. Leave at least one square BETWEEN bars.
6. Give the bar graph a title.

Creating LINE Graphs

1. Draw a horizontal X-axis & a vertical Y-axis
2. Label the the X-axis the MANIPULATED variable. Label the Y-axis the RESPONDING variable. Include units.
3. Create a scale on each axis by marking off equally spaced numbers along the axis. Begin with zero or slightly less than the smallest number to be graphed. Each scale should cover the entire range of data collected. Label units.
4. Plot points where variables intersect. Place a dot here.
5. Lines connecting dots should be drawn with a ruler. Best-fit lines should also be straight, drawn with a ruler.
6. Title your graph.