

**Survey and Statistics**  
**Lesson 9**  
**Scatter Plots**

**Objectives:**

Students will create a scatter plot and investigate data to determine if there is a positive or negative correlation.

**Materials Needed:**

- 1) Line graphs and scatter plots from the newspaper or magazine
- 2) A large sheet of butcher paper with two lines for x and y axis
- 3) Tools for measuring

**Opening Activity:**

- 1) Ask the students to tell you the parts of a graph (main title, x and y-axis titles.)
- 2) As they tell you the parts of the graph, write down the following information on the butcher paper to create a graph.
  - a) Title = A Comparison of Shoe Length to Height.
  - b) X-axis = Shoe Lengths (Decide as a class on the scale and numbers).
  - c) Y-axis = Height (Decide as a class on the scale and numbers).

**Activity:**

1. Demonstrate using your own shoe length and height how to plot on a scatter plot. You should put find your shoe length on the x-axis and your height on the y-axis.
2. Have the students work in pairs to measure their own shoe size and height.
3. The students should place their comparison coordinate on the scatter plot.
4. Decide what type of correlation this graph is. If it is positive, the graph will form a line going upward. If it is negative, the graph will form a line going downward.

**Closure:**

Look at some other line graphs or scatter plots. Is the correlation positive or negative?