Name _____ Period _____

CONDUCTING A CORRELATIONAL STUDY

This exercise is designed to help you get some practice with correlational studies. You will design and carry out your own study on any data you want. Some examples: Does shoe size and GPA correlate? Does number of years in school and number of friends at school? Does time spent studying and grade on the last exam? Feel free to be creative when deciding what data to collect. Just remember – the data that you collect must be able to be measured numerically! Therefore, do not use data such as "hair color."

Step 1: Determine which two factors you would like to do a correlational study on.

Factor 1: Factor 2:

Step 2: Collect your data and organize it into the chart below. For example, if you're doing shoe size and GPA, you would ask the first person for their GPA and then their shoe size and put the data points in the same row. You must get at least 15 people to participate in your correlational study.

Example

Shoe Size	GPA
11.5	2.47

Your chart:

Factor 1: _____	Factor 2: _____

Step 3: Graph your data by plotting your paired points. Make sure to label each axis.

Step 4: Make a best fit line on your graph above.

Step 5: Determine the correlation of your data. If the best fit line is upward sloping, there is a POSITIVE correlation. If the best fit line is downward sloping, there is a NEGATIVE correlation. If the best fit line is horizontally or vertically straight, there is NO CORRELATION.

What type of correlation does your data demonstrate? (Positive, Negative, or None)

If you find a correlation between your factors, does this mean that one factor causes the other? Why or why not?

If you find a correlation between your factors, what could possibly be a third variable that's influencing both of them?