Scatter Plot Project

Now that we know a little more about scatter plots, it is time to do our own research. Find a topic to investigate that is of interest you and has some type of correlation (positive or negative). Make sure that both variables are **quantitative** (numerical). Some examples include how much money athletes make vs. how long they have been playing; how old a car is vs. how much it is worth; how many downloads musicians have vs. how many twitter followers they have; or how many games a quarterback has won vs. how much money he makes. We will then make a table of our data, create a scatter plot of it, and answer some questions about it. We will then assemble all of our findings into a presentation.

100 points total

Thinking Ahead (5 points)

What topic did you choose and what are your two variables?

What type of association do you predict your data to have? (Positive or negative? Strong or weak?) Explain why you think this.

Where did you gather your information from?

Collecting Data and Graphing (30 points)

Collect and record your data. You must collect at minimum of 10 different data entries. (10 points)

In the space below, create a scatterplot of your data with appropriately labeled axes. Then draw the line of best fit. (20 points)
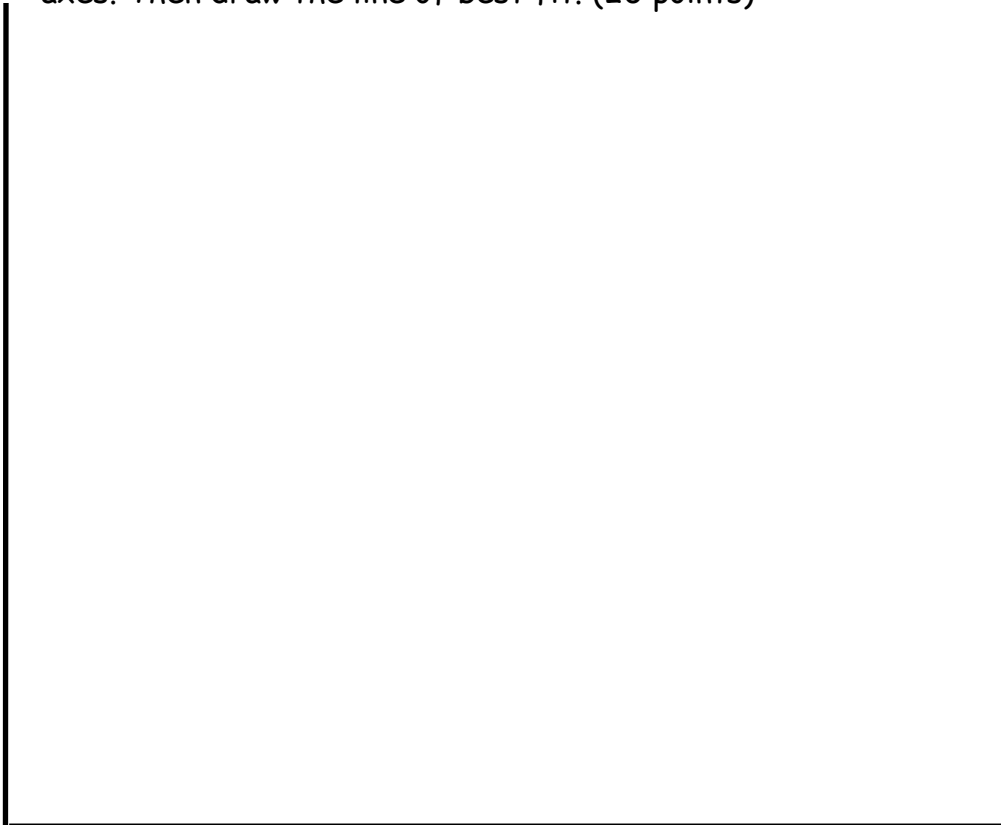
Analyzing our Data (15 points)
Describe the association of your data. Is it positive or negative? Is it strong or weak? How does this compare to your prediction? (10 points)

Based on your line of best fit, write **two** questions about your data and answer them. One must use interpolation and one must use extrapolation. (Example: If a quarterback has won 180 games, how much will he earn?) (5 points)

Now that you have collected all of the necessary data, create a Google presentation for your data. The presentation must include the following: (50 points)
1. Introduction to your topic
    a. What two things are you comparing?
    b. What type of association did you predict it would have?
    c. Where did you get your information from? Cite your sources.
2. A table of the data
3. A scatter plot of the data with the line of best fit (describe the association)
4. Two questions for the class to answer using the line of best fit (one using interpolation and one using extrapolation)