

You will gather **QUANTITATIVE** data by taking a random sample of the population, or by gathering data through the internet, almanacs, or any other sources that have real world data. The focus of your study is up to you, but please clear your topic with me as I don't want similar projects.

Gathering Data (5 Points)

1. If you are sampling or surveying, create a survey for people to fill out/respond to. You must survey **at least** 100 respondents.
2. If you choose not to do a real life sample, you must indicate from where your data came, such as a link, including it in the hard copy you turn into me. You also must include **at least** 100 pieces of data.

Analyzing Your Data (8 Points)

Once your data has been gathered, you will find the mean, median, mode (if it exists), standard deviation, IQR and the 5 number summary. Indicate which measure of center and spread best represents your data and **why**.

Displaying Your Data (20 Points)

Create a frequency distribution, along with **THREE** graphical displays about your data set – *histogram, stem-and-leaf plot, box and whisker, ogive, pareto chart, pie chart, etc. ***ONE OF YOUR DISPLAYS MUST BE A HISTOGRAM**. They must be created by hand, drawn neatly, include titles, labels, units.

Sharing Your Data (4 Points)

Create 2 or 3 power point slides that describe the data you collected. Perhaps they might say something like, "Did you know that 75% of students spend more than \$10 per week on lunch?" or "The average number of tardies for first hour during one week is 8."

Quality/Neatness/Visual Appeal (8 Points)

Self explanatory

What To Turn In

You will need to turn in your data, your calculations for your data analysis, and your data displays. A hardcopy of your project must be printed...online submissions will not be accepted. Please organize everything neatly. Its quality will affect your grade.

This project is optional, but not extra credit. If you choose to do it, be sure to invest the proper time and effort so that it will help, not harm, your grade.

This project is due no later than Monday, January 13, 2020.