

Name _____

Data Collection Project 1 (100 points) Due by October 4th

Look around your living space or current surroundings and find a *quantitative continuous variable* for which you can collect *at least 20 observations* (examples: The length of the first 25 songs on a Spotify playlist or the monetary amounts for the last 22 checks/debit card withdrawals on your checking account) **Include a table of your collected data.**

Using the *quantitative continuous* data in your spreadsheet or list:

You may use technology for all parts. No need to calculate these values by hand.

- a. Find the five number summary for your data. (10 points)
- b. Find the mean and the standard deviation of your data. (10 points)
- c. Draw a boxplot (10 points)
- d. Create a Frequency Table. (10 points)
- e. Draw a histogram representing your relative frequency table (10 points)
- f. Refer to your picture in part c and e. Comment on the shape/center/spread. Include a discussion about what is the most appropriate measure of center and spread (Part a or part b) Talk about why how the shape of the distribution supports your decision (20 points)
- g. Compare the mean and the median. Explain whether the relationship between them is what you would expect based on the information you discussed in part f. Hint: you want to be thinking about the shape (20 points)

I need your data to check your work. No data = 0 for a grade. *Not enough data or the wrong type of data means a 50% for a maximum grade.*