## **GRAPH THE DATA**

To complete this activity, use either your created set of data or the one provided by your teacher. Read your data set and familiarize yourself with the information. Then, respond to the questions below to complete your data analysis.

- 1. Sort your data in a reasonable way. You could sort alphabetically, numerically, or in any other way that helps you make sense of the data.
- 2. Using your calculator, spreadsheet, or your brain, calculate the mean, median, and mode of your data set. These are called *central tendencies*.

MEAN (average) \_\_\_\_\_

MEDIAN (central value) \_\_\_\_\_

MODE (value that occurs most frequently) \_\_\_\_\_

What do these three values tell you about the data that you didn't know before?

Do you notice any differences between the mean, median, and mode? Why do you think these differences matter?

Which of these three central tendencies provides the most descriptive information for your data set? Why?

3. Using your data set, find the maximum, minimum, and values associated with each quartile (Q1, Q2, Q3, and Q4).

MAXIMUM \_\_\_\_\_

MINIMUM \_\_\_\_\_





4. Sketch a box and whisker plot using the values you found in question 3.

Your Box and Whisker Plot



5. What does this plot tell you about your data? What do you know now that you maybe didn't know before?

