GRADE SIX EXTEND ACTIVITY

For this Extension Activity, you will be either generating a data set of your own or working with one provided to you by your teacher. Be sure to have your teacher clarify which you are working on. To begin, open your data set, read it, and become familiar with what you are studying. Below, you'll be asked to answer some questions to help you analyze your data set.

1. Sort your data in a reasonable way. This could be alphabetical, numerically, or in another way that helps you make sense of your 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) _____

After calculating these three values, what does this tell you that you didn't know before?

Did you notice any differences in 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 _____

    Q1 _____   Q2 _____   Q3 _____   Q4 _____

4. Next, construct a Box and Whisker Plot using the values you have found in question three.

    Your Box and Whisker Plot

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