

In groups of 2-4 students, decide on a survey question to use for this project. The question must have a specific, objective number answer for each person surveyed and a reasonable spread of values. Write the survey question on your paper.

Collect 30 responses to your question including one response from each group member. List the 30 responses on your paper.

Use that set of 30 values to do the following:

Create a stem-and-leaf plot of the values (in order).

Draw a box-and-whisker plot. Clearly identify  $Q_1$ ,  $Q_2$ , and  $Q_3$ . Determine and label the IQR. Show the arithmetic work to determine whether there are any outliers. Mark any outliers with an asterisk and draw your whisker to the next closer data value.

Draw a histogram using at least six, but no more than ten evenly-spaced intervals.

Determine and label the mean and the standard deviation of your data set. Show the complete list of differences and their squares as well as the sum of the squares.

Determine the z-score for your own response. Explain how you determined this.

Each student is to turn in ALL of the above work organized in a neat and orderly fashion. Group members are encouraged to compare work, but do NOT photocopy each other's work!!!

List your name at the top and also all of the other members of your group.

The grade for this project will count as two quiz scores (20 points).