This activity introduces you to the basic statistics that researchers use to summarize their sets of data.

The numbers below represent the scores of a group of students on a math test. Use them to perform the required calculations.

10, 13, 10, 12, 11, 7, 12, 11, 6, 11, 12, 11, 8, 10, 9

Distribution of Scores
- Sort the scores; that is, arrange them in order from lowest to highest.

- Create a frequency histogram.

Measures of Central Tendency
- What is a mode?

- What is the mode of your distribution? _____________________

- What is a median?

- What is the median of your distribution? _____________________
Measures of Central Tendency (continued)

• What is a mean?

• How is a mean calculated?

• What is the mean of your distribution? _________________ Show your calculations.

Skewed Distributions

• Which measure of central tendency would be the best “average” to describe a skewed distribution? Why?

Measures of Variability

• How is a range calculated?

• What is the range of your distribution? ______________________

• What is standard deviation?

• How is standard deviation calculated?