**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ID:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Course: PSYC 1100 Section:\_\_\_\_\_\_ Instructor:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**DESCRIPTIVE STATISTICS**

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 by arranging them in order from lowest to highest.

Watch the following video on frequency histograms:

<https://www.youtube.com/watch?v=R_D-PuMUT24>

* Based on the scores you have just sorted, create a **frequency histogram** below using the chart function under the “Insert” tab or by copying and pasting a chart made in excel onto this document:

**Measures of Central Tendency**

Watch the following video on central tendency:

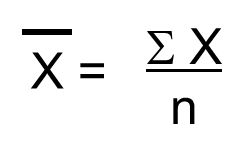
<https://www.youtube.com/watch?v=ZVxZBK9Vm5w>

* 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?

* Here is the formula to calculate the mean of a distribution:



* What is the mean of your distribution? Show your calculations.

**Measures of Variability**

Watch the following video on measures of variability (Begin watching at 4:08):

<https://youtu.be/mk8tOD0t8M0?t=237>

* How is a range calculated?
* What is the range of your distribution? \_\_\_\_
* Here is the formula for population standard deviation:



Note: The video above uses sample standard deviation formula.

* What is the standard deviation for your data set?
* What does the standard deviation tell you?