Measures of Central Tendency: The Mean, Median, Mode, and Range

When finding the measures of central tendency the first step is to place the numbers in order from <u>least</u> to <u>greatest</u>

<u>Mean</u> (Average): Add up a list of values in a set of data and divide by the number of values you have.

6, 4, 4, 3, 8

Step 1	Put in order from least to greatest	**3, 4, 4, 6, 8**
Step 2	Add up all the numbers	**3 + 4 + 4 + 6 + 8 = 25**
Step 3	Divide by the number of values you have	**25 ÷ 5 = 5**
Answer		**The mean is 5**

<u>Median</u> (Middle): The middle value in a set of data when the values are written in order. If there are 2 values in the middle, find the mean of the two.

6, 4, 4, 3, 8

Step 1	Put in order from least to greatest	**3, 4, 4, 6, 8**
Step 2	Find the middle number **If there are an odd number of data values	**3, 4, *<u>4</u>*, 6, 8**
Answer		**The median is 4**
	6, 4, 4, 3, 8, 5	
Step 1	Put in order from least to greatest	**3, 4, 4, 5, 6, 8**
Step 2	Find the middle number **If there are an even number of data values then there will be two middle numbers	**3, 4, *<u>4, 5</u>*, 6, 8**
Step 3	Find the mean of the two middle numbers	**4 + 5 = 9** **9 ÷ 2 = 4.5**
Answer		**Median = 4.5**

<u>Mode</u> (MOST): The value in a set of data that is repeated most often. A set of data could have no mode, one mode, or more than one mode.

6, 4, 4, 3, 8

Step 1	Put in order from least to greatest	**3, 4, 4, 6, 8**
Step 2	Find the number that occurs most often	**3, *<u>4</u>*, *<u>4</u>*, 6, 8**
Answer		**The mode is 4**

<u>Range</u>: The largest number minus the smallest number

6, 4, 4, 3, 8

Step 1	Put in order from least to greatest	**3, 4, 4, 6, 8**
Step 2	Subtract the largest number minus the smallest number	**8 - 3**
Answer		**The Range = 5**