Name: _____                         Date: _____

| Learning Goal 9.2 | I can demonstrate an understanding of data analysis. |
|---|---|

Let's take some measurements!

| Name | Height (in cm) | Shoe Size (in womens) |
|---|---|---|
| Abir | | 8 |
| Owen | | 10.5 |
| Gerald | | 10 |
| Jessie | | 7.5 |
| Marcus | | 10 |
| Ryan | | 11 |
| Angelina | | 7 |
| Isabella | | 6.5 |
| Kyle | | 11 |
| Cindy | | 6.5 |
| Casandra | | 6.5 |
| Mia | | 7 |
| Cailyn | | 8 |
| Riley | | 8.5 |
| Sofia | | 8 |
| Vincent | | 9 |
| Maceo | | 12 |
| Maximo | | 12.5 |
| Katia | | 7 |
| Andy | | 11 |
| Oceano | | 10.5 |
| Mari | | 7.5 |
| Simon | | 9 |
| Zoe | | 7.5 |
| Ryan | | 11.5 |
| Aaron | | 13 |
| Yu Kai | | 11.5 |

*average - add all the numbers and divide by the number of entries*

What is the **mean** height of the students in this class?  What is the **mean** shoe size of students in this class?

$$\bar{s} = 8 + 10.5 + 10 + 7.5 + 10 + 11 + 7 + 6.5 + 11 + 6.5 + 6.5 + 7 + 8 + 8.5 + 8 + 9 + 12 + 12.5 +$$
$$7 + 11 + 10.5 + 7.5 + 9 + 7.5 + 11.5 + 13 + 11.5$$
$$\overline{\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaa}}$$
$$28$$

$$= \frac{237.5}{27} \doteq 9 \quad \text{in womens sizes}$$

*← middle value of an ordered list*

What is the **median** height of students in this class?  What is the **median** shoe size of students in this class?

6.5   6.5   6.5   7  7  7  7.5   7.5  7.5  8  8  8  8.5  9  9  10  10  10.5  10.5  11  11  11  11.5  11.5  12

12.5   13

Median is also 9.

*← the most frequent value.*

What is the **mode** of the heights of the students in this class?  What is the **mode** of the shoe sizes of the students in this class?

5 different modes :  6.5, 7, 7.5, 8, 11

*← biggest value  –  smallest value.*

What is the **range** of heights of students in this class?  What is the **range** of shoe sizes of students in this class?

13 – 6.5 = 6.5

Excel
 – will sort
 – will calculate
     the averge
     median
     mode
     range.

|          | Height | Shoe Size |
|----------|--------|-----------|
| Mean     |        |           |
| Median   |        |           |
| Mode     |        |           |

Assignment                              Handout                              Quiz Next Day!