**Excel Skillz**

**You Got ‘Em???**

Calculations

* **Average**. Use the function =AVERAGE(data set)
* **Standard deviation**. Use the function =STDEV.S(data set) for Excel versions 2008 and later. [Note: Use the function =STDEV(data set) for Excel versions 2007 and earlier.]
* **Standard Error**. Use the function =(Standard deviation value)/(SQRT(n))

Graphing

* **Graph**. Select the data you want to graph; Insert; Column graph; choose “2D Clustered Column.” *Important note*: Each column should be a different color; if they are not then select Chart Tools; Design; Switch Row/Column.
* **Title**. Chart tools; Layout; Chart title.
* **Y-axis label**. Chart tools; Layout; Axis titles; Vertical axis title.
* **Y-axis number range**. Click on the y-axis numbers; Right click; Format axis; Set minimum, maximum, and intervals.
* **X-axis label**. Chart tools; Layout; Axis titles; Horizontal axis title.
* **Separating columns**. Click on column; Right click; Format data series; Increase the separation.
* **Error bars**. Click on column; Chart tools; Layout; Error Bars; More Error Bar Options; Fixed value; Type in your standard error; Repeat for each column.

Your assignment

1. Recreate the data table and calculations shown on the attached page. Use Excel functions to calculate average, standard deviation, and standard error.
2. Recreate the graph shown on the attached page.
3. Copy your graph into a word document and upload it to TurnItIn. Your graph must include a title, x and y axis labels, separated columns, and error bars. (5 points)