## Unit 1 Discussion: What's Your Frequency?! Describing Data with Numbers and Graphs

## Unit 1 Discussion Example – Main Post

**Main Post:** Visit the <u>dataset link</u> to view the datasets that accompany our textbook. Review the dataset titles and select a data set of interest to you. (Note: You may need to use more than one data set to complete this Discussion.) See the DB starter video in the <u>Unit 1 LiveBinder</u>.

- 1. State the dataset that you selected. For each variable in your data, identify it as either qualitative and quantitative. (If your dataset does not have both types of variables, please pick an additional dataset to share at least one qualitative and one quantitative variable.)
- 2. Select one of your quantitative variables and determine whether it is discrete or continuous. (Please do not select the same variable as a classmate.)
- 3. For that same variable create a frequency distribution table including frequency, relative frequency and cumulative relative frequency. Copy and paste the table directly into your discussion post or attach it as a separate file.

1. I choose to download and analyze the Cereal\_Data.xlsx

Qualitative variables: Shelf, Name, Manufacturer, Type

Quantitative variables: Calories, Protein, Fat, Sodium, Fiber, Carbohydrates, Sugars, Potassium, Vitamins, Weight (of One Serving Cup), Cups in Serving

2. I will consider the quantitative variable, Calories. It is a measurement that can take on any value in an interval so it will be considered continuous. Note, usually it is measured in whole number precision and that is what is recorded in the data spreadsheet.

3. Frequency Distribution table for Calories:

Cereal_Data			
BINS	Frequency	<b>Relative Frequency</b>	Cumulative %
61	3	3.90%	3.90%
72	2	2.60%	6.49%
83	1	1.30%	7.79%
94	7	9.09%	16.88%
105	17	22.08%	38.96%
116	29	37.66%	76.62%
127	10	12.99%	89.61%
138	2	2.60%	92.21%
149	3	3.90%	96.10%
160	3	3.90%	100.00%
More	0	0.00%	100.00%