Review for Exam 1 (Chapters 1, 2, 3, 4)

Chapter 1

Statistical Terms:
- population
- sample
- parameter
- statistic
- descriptive statistics
- inferential statistics
- sampling error

Measurement Terms:
- nominal
- ordinal
- interval
- ratio
- discrete variable
- continuous variable
- real limits

Research Terms:
- correlational study
- experimental study
- independent variable
- dependent variable
- non-experimental study
- quasi-independent variable

Know the different scales of measurement
Know how statistical techniques fit into the general process of science
- -sampling error
- -how descriptive statistics are used and where inferential statistics are used

Understand the different notations used in this chapter (summation)
Know your order of operations

Chapter 2

What is a frequency distribution?
Be able to organize data into a regular or grouped frequency distribution table
Identify the different types of distribution graphs (bar graphs, histograms, and polygons)
Understand what population distributions look like
Identify types of distributions (symmetrical, normal, positively skewed, negatively skewed)

Chapter 3

What is the purpose of measuring central tendency?
What are the different measures of central tendency?
Under which circumstances would each of the 3 measures of central tendency be appropriate?
How are the 3 measures of central tendency related to each other in symmetrical and skewed distributions?
Which graphs are appropriate for which measure of central tendency?

Chapter 4

Understand the purpose for measuring variability.
Be able to calculate the following for samples and populations:

- -range
- -sum of squared deviations
- -variance
- -standard deviation

Know the symbols and notations for the above calculations.