(possibly incomplete list of)
Topics Covered from Chapter 1 to Section 4.5

Chapter One: Statistical Thinking

Population   their definitions and how they are related, why do we
Sample   take a sample? why should it be representative?
Representative Sample   how do these relate to making inferences?

Quantitative vs. Qualitative data

Chapter Two: Descriptive Statistics

Class, Class Frequency, and Relative Class Frequency

How to construct and read a *relative frequency histogram*.
The use of size to represent probability, in particular area in histograms.

Mean (of a sample)   how to calculate these statistics, and
Median   when we would use each one
Mode

Range
Variance (of a sample)   you will be given the formula for the variance,
Standard Deviation (of a sample) but will need to know how to use it

Skewed right or skewed left, and how this relates to the mean and median

Empirical Rule (68, 95, almost all) and when it applies
Chebyshev's Theorem, you will be given the formula $1-1/k^2$ what does it mean?

z-scores
Percentiles
Interquartile Range
When to use the IQR instead of the SD
What a box plot says about the shape of a distribution, how it is constructed, and how to use it to
  identify outliers

<u>NOT:</u> Stem and Leaf Plot

Chapter Three: Probability

Sample Point
Sample Space
Event

$P(A \cup B) = P(A) + P(B) - P(A \cap B)$ You need to remember these two!
$P(A \cap B) = P(A)P(B|A)$

Mutually Exclusive   their definitions, and how they affecte the multiplicative
Independent   and additive rule
Complement

Factorials   what they are, how they are used
Binomial Coefficient

Chapter Four: Random Variables

Random Variable
Discrete Random Variable
Continuous Random Variable

Discrete Probability Distribution   if given the formula, how to calculate
Mean (of a discrete random variable)   these, and what they tell us
Expected Value (of a discrete random variable)   about the variable
Variance (of a discrete random variable)
Standard Deviation (of a discrete random variable)

Recognize the formulas for the *Binomial* and *Hypergeometric* distributions (you will be given
    them, but won't be told which one is which), know what the parameters mean, and how and
    when we would use them. Know the formula for the mean and variance of the binomial
    (but you will be given them for the Hypergeometric)

Continuous Probability Distribution
Normal Distribution
Standard Normal
Changing a Normal to a Standard Normal

Know that probability is area for continuous random variables. Be able to use a normal table to
    calculate probabilities for a Normal random variable.