CHAPTER 2
Picturing Variation with Graphs

Section 2.1 Visualizing Variation in Numerical Data

Write the vocabulary terms in this section on 3 x 5 cards and study them. Important terms include **distribution of a sample, frequency, dotplot, histogram, relative frequency, stemplot, stem, leaf.**
Be sure to also read and study the key points, highlighted in the blue boxes in the text.
Be able to

- Interpret a dotplot and know how to create one
- Explain the difference between a dotplot and a histogram
- Explain the difference between frequency and relative frequency

Section 2.2 Classifying and Storing Data

Write the vocabulary terms in this section on 3 x 5 cards and study them. Important terms include **typical value, center, variability, spread, symmetric, bell shaped, right-skewed, left-skewed, unimodal, bimodal, multimodal, outliers.**   Be sure to also read and study the key points, highlighted in the blue boxes in the text.
Be able to:

- determine if a distribution is symmetric, right-skewed, left-skewed
- determine if a distribution is unimodal, bimodal, or multimodal
- Explain what an outlier is
- Know what might cause a distribution to have more than one mound (p. 50)

Section 2.3 Visualizing Variation in Categorical Variables

Write the vocabulary terms in this section on 3 x 5 cards and study them. Important terms include **bar chart (bar graph), Pareto chart, pie chart**
Be sure to also read and study the key points, highlighted in the blue boxes in the text.
Be able to:

- Understand that this section discusses graphs for CATEGORICAL DATA;
- Discuss the differences between a bar chart and a histogram;
- Discuss the advantages and disadvantages of using a bar chart vs a pie chart.

Section 2.4 Summarizing Categorical Distributions

Write the vocabulary terms in this section on 3 x 5 cards and study them. Important terms include
mode, variability
Be sure to also read and study the key points, highlighted in the blue boxes in the text.
Be able to:

- Identify the mode of a distribution of a categorical variable
- Given a bar chart for each of two distributions, accurately compare the variability of the two distributions

Section 2.5 Interpreting Graphs

Be able to name two ways that a manipulative person might misrepresent data with statistical graphs