Chapter One Vocabulary

Individuals are the objects described by a set of data. Individuals may be people, but they may also be animals or things

A ***variable*** is any characteristic of an individual. A variable can take different values for different individuals.

quantitative variable

Something that can be counted or measured for each individual and then added, subtracted, averaged, etc., across individuals in the population.

Example: How tall you are, your age, your blood cholesterol level, the number of credit cards you own.

categorical variable

Something that falls into one of several categories. What can be counted is the count or proportion of individuals in each category.

Example: Your blood type (A, B, AB, O), your hair color, your ethnicity, whether you paid income tax last tax year or not.

The number of individuals/units in the sample is designated by ***n.***

Bar graphs and Pie charts
are ways to chart categorical data.

In a **Bar graph**
each category value is represented by a bar.

In a **Pie charts**
the area of the pie slice represents that values portion of the whole.

Histograms and **stemplots**

are ways to chart a single quantative datum.

A distribution is **symmetric** if the right and left sides of the histogram are approximately mirror images of each other.

An important kind of deviation is an **outlier.** Outliers are observations that lie outside the overall pattern of a distribution**.**