KEY TERMS

The **population** is the entire group of individuals about which information is desired. A **sample** is a subset of the population from which information will be extracted. A **representative sample** is one that accurately reflects the members of the entire population. A **biased sample** is one in which some individuals or groups from the population are less likely to be selected than others due to some attribute.

A **sampling design** describes how to select the sample from the population. There are many sampling designs, including the following:

- **Simple random sampling** is a sampling design that chooses a sample of size *n* using a method in which all possible samples of size *n* are equally likely to be selected.
- **Convenience sampling** is a sampling design in which the pollster selects a sample that is easy to obtain, such as friends, family, co-workers, and so forth.
- **Voluntary sampling** or **self-selecting sampling** is a sampling design in which the sample consists of people who respond to a request for participation in the survey.
- **Multistage sampling** is a sampling design that begins by dividing the population into clusters. In stage one, the pollster choses a (random) sample of clusters. In subsequent stages, random samples are chosen from each of the selected clusters.
- **Stratified sampling** is used to ensure that specific non-overlapping groups of the population are represented in the sample. The non-overlapping groups are called **strata**. In a **stratified random sample**, the sample is obtained by taking random samples from each of the strata.