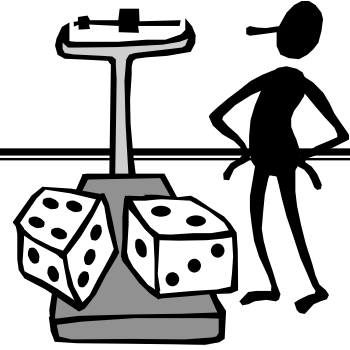


## Chapter 12: Sample Surveys



### Key Vocabulary:

- |                              |                            |                             |
|------------------------------|----------------------------|-----------------------------|
| ▪ population                 | ▪ sampling frame           | ▪ voluntary response sample |
| ▪ sample                     | ▪ sampling variability     | ▪ convenience sampling      |
| ▪ sample survey              | ▪ homogeneous groups       | ▪ undercoverage             |
| ▪ biased                     | ▪ heterogeneous groups     | ▪ nonresponse bias          |
| ▪ randomization              | ▪ strata                   | ▪ response bias             |
| ▪ census                     | ▪ stratified random sample |                             |
| ▪ parameter                  | ▪ cluster sampling         |                             |
| ▪ statistic                  | ▪ multistage sampling      |                             |
| ▪ Simple Random Sample (SRS) | ▪ systematic sampling      |                             |
|                              | ▪ respondents              |                             |

1. Explain the difference between a *population*, a *sampling frame*, and a *sample*.
2. What does it mean for a sample to be *representative* of a *population*?
3. What is meant by a *biased* sample?
4. What is the role of *randomization* in selecting a sample?
5. What is meant by a *census*? Why is a *census* often impractical?
6. Explain the difference between a *parameter* and a *statistic*.
7. A *Simple Random Sample* (SRS) must satisfy what two conditions?
8. What is meant by *sampling variability*?

9. When is meant by *stratified random sampling*?
10. When is meant by *cluster sampling*?
11. What is meant by a *multistage sampling*?
12. When is meant by *systematic sampling*?
13. In what way are *voluntary response samples* often *biased*?
14. Why is *convenience sampling* unreliable?
15. What is meant by *undercoverage*? Give an example.
16. Explain the difference between *nonresponse bias* and *response bias*.
17. How can the wording of questions cause bias in a survey?

