Data and Chance notes Chapters 1 and 2

Below are terms from the readings. Write definitions and examples in the spaces provided. Answer the questions where indicated.

Chapter 1: Where do data come from?

Variable:

Individuals (elements):

Observational study:

Sample survey:

Population:

Sample:

Census:

Experiment:

Why does an experiment give better evidence for cause and effect than an observational study?

Chapter 2: Samples, good and bad

Bias:

Convenience sample (give an example also):

Voluntary sample (give an example also):

What is the major problem with using voluntary samples to infer about a population?

Simple random sample:

We have a population of 250 adults. We want to sample ten of the m. Give a brief description of how you would use the random number table to pick your sample.