Name: _____   Date: _____

Practice: Sampling Principles

1. Identify each population.
   a) Parking for students at urban high schools is limited.
   b) Vet bills for older cats are higher than for young cats.
   c) The average grade 9 science mark on the report cards this term was 78%.
   d) Getting 30 minutes of exercise each day improves overall health.

2. Would you use a census or a sample to answer each question?
   a) Who is expected to win the next provincial election?
   b) What is the average life, in hours, of a particular brand of light bulb?
   c) What is the most popular brand of running shoe worn by students in your class?
   d) The relationship between an adult's height and shoe size.

3. Suppose you wanted to know how students at your school travel to school. Describe how you would select a systematic random sample to collect data.

4. The principal at a school places a suggestion box outside the main office to find out students' opinions about a new school policy.
   a) What is the population?
   b) What sampling method is being used?
   c) Explain why the sample is biased.

5. Frieda wants to know how many grade 9 students have a part-time job.
   a) What is the population?
   b) How could Frieda select a sample to survey?

6. Which type of sample is used? Is the sample likely to be biased?
   a) The principal asks five randomly selected students from each home class how they feel about a new school policy.
   b) A polling firm uses a random number system to select households. A member of each household selected is asked whether they plan to take a vacation this year.