Name	Date
------	------



In Exercises 1–3, identify the population and classify the sampling method.

- **1.** The manager of a movie rental store wants to evaluate how customers rate the selection of movies that the store has in stock. Customers are given comment cards with their receipts.
- **2.** Your school's administrators want to know if students are satisfied with food choices on the school menu. In each grade, every eighth student in alphabetical order is surveyed.
- **3.** At a family reunion, the next year's reunion location is randomly chosen to be at one of the family member's homes. Each home is put on a slip of paper into a hat. The location is chosen by pulling a name from a hat.

Tell whether the survey method used is likely to result in a biased sample.

- **4.** The owners of a music store chain want to determine whether or not they should open their stores an hour earlier. They survey the customers in one of their stores at random.
- **5.** A group of students living in the dormitories at a college wants to gather information about the need for a shuttle bus to a local shopping center. They survey every fourth room on each floor of each dormitory.

In Exercises 6 and 7, tell whether the question is potentially biased. *Explain* your answer.

- **6.** Do you think that fresh fruit should be offered on the lunch menu?
- **7.** Don't you agree that replacing a parking lot with a city park would help decrease pollution in the city?

In Exercises 8–10, explain why the question is biased. Then rewrite it so that it is not.

- **8.** Don't you agree that it is better to offer water than soft drinks in the school's vending machine?
- **9.** Don't you agree that a music concert would be more fun to go to than a museum?
- **10.** Would you pay even higher taxes to fund a new civic center?
- **11. Street Conditions** A television station does a report on the condition of the streets in a large city. Part of the report includes a survey of people that live in the area. The survey is done by asking people at a bus stop what they think of local street conditions. Is this sample necessarily representative of local residents? *Explain*.