

**LESSON**  
**8-2****Problem Solving****Data Gathering**

**One hundred students out of 1100 at a school were surveyed. The results are recorded in each problem below. For Exercises 1–4, predict the number of students in the population that would answer similarly.**

1. Eighty-two students said they would take a study hall or resource period if it were offered. \_\_\_\_\_
2. Twelve students said they were members of the after-school music program. \_\_\_\_\_
3. Ninety-four students said they used the Internet for their homework. \_\_\_\_\_
4. Thirty-two students said they drove to school. \_\_\_\_\_
5. The principal wanted to know if he should allow cell phones in the classroom. He surveyed the students in Algebra 2 class. Decide whether the sampling method could result in a biased sample. Explain your reasoning.  
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6. A discount store chain wants to know how often families in a certain area would shop regularly at a discount store. Their representative surveys 100 people at a mall in the same area. Are his results likely to be representative of the population? Explain.  
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**Select the best answer.**

7. The director of the Glee Club would like to know if her Booster Club parents would do a fundraiser. Which sampling method is most likely to yield an accurate prediction of the population?
  - A Survey every 3rd Booster Club parent who comes to a fundraiser meeting.
  - B Survey every 10th Booster Club parent who comes to a fundraiser meeting.
  - C Survey only the parents who respond to a letter from the director.
  - D Survey only the parents who run the Booster Club.
8. The principal of the school would like to determine if the cafeteria should sell snacks during non-lunch hour periods. Which sampling method is most likely to yield an accurate prediction of the population?
  - F Survey every 20th student who enters the cafeteria during lunch hour.
  - G Survey 50 random students each from the 9th, 10th, 11th, and 12th grades.
  - H Survey the first 25 students that walk into the school.
  - J Survey the entire 12th grade class.