Name: _____   Is It Valid?
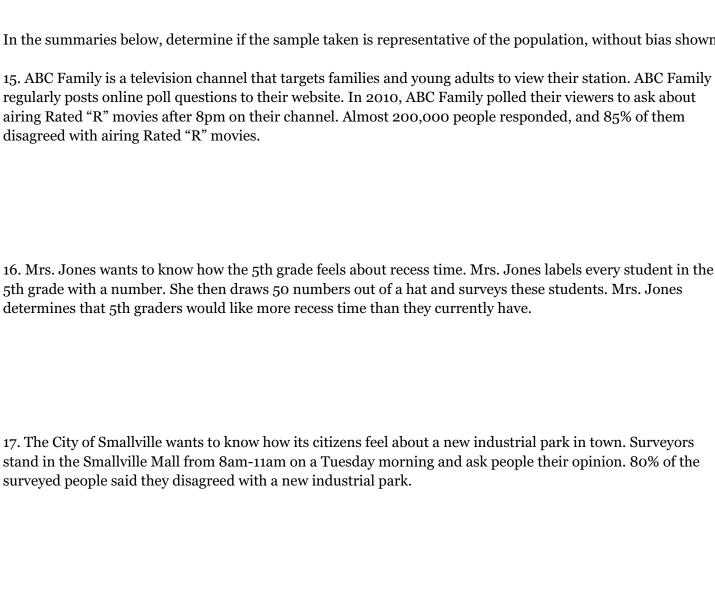
As you enter the room, please complete the five survey questions posed by your teacher.

PART I
A survey is a method of collecting information. These pieces of information, numbers and facts, are called data.

DESCRIBE YOUR CLASS SURVEY
In the space below, compile the data collected by your classmates.

1. What color is your hair? Brown _____ Blond _____ Red _____ Black _____

2. Do you carry a cell phone? Yes_____ No _____

3. About how many text messages do you send in a day? 0-20 _____ 21-40 _____ >40 _____

4. About how much time do you spend on homework? 0-15 min _____ 16-30 min _____ 31-45 min _____

46-60 min _____ > 60 min _____

5. What month were you born? Jan – March _____ April – June _____ July-Sept. _____ _Oct-Dec _____

Using the survey results discuss the following vocabulary.

6. What is the population of your survey?

7. Did your class perform a census or a survey?

8. How would you record your results from question 1 as a piece of data?

9. How would you describe your results from question 2 as a parameter for the population?

For each of the problems below, answer the questions in regard to population, samples, and surveys.

After the 2000 census, the United States Census Bureau reported that 7.4% of Georgia residents were between the ages of 10 and 14.

10. Was a parameter or a statistic reported? Explain your reasoning.

11. What is the population for this survey?

The manager of the Millcreek Mall wants to know the mean age of the people who shop at the mall and the stores in which they typically shop. He hires Barker Market Research Company to collect the data. Dennis works for the Barker Market Research Company and has been put in charge of collecting data for the Millcreek Mall. Dennis decides to interview 100 people one Saturday because it is the mall's busiest shopping day.

12. Is the survey a sample or a census?

13. What is the population for this survey?

14. Is the sample size for the survey appropriate?

There are three key things to look for when determining if a survey is biased.

- Is the survey voluntary?

- Does the survey exclude any group?

- Is the sample size appropriate?

In the summaries below, determine if the sample taken is representative of the population, without bias shown:

15. ABC Family is a television channel that targets families and young adults to view their station. ABC Family regularly posts online poll questions to their website. In 2010, ABC Family polled their viewers to ask about airing Rated "R" movies after 8pm on their channel. Almost 200,000 people responded, and 85% of them disagreed with airing Rated "R" movies.

16. Mrs. Jones wants to know how the 5th grade feels about recess time. Mrs. Jones labels every student in the 5th grade with a number. She then draws 50 numbers out of a hat and surveys these students. Mrs. Jones determines that 5th graders would like more recess time than they currently have.

17. The City of Smallville wants to know how its citizens feel about a new industrial park in town. Surveyors stand in the Smallville Mall from 8am-11am on a Tuesday morning and ask people their opinion. 80% of the surveyed people said they disagreed with a new industrial park.

18. The National Rifle Association (NRA) took a poll on their website, www.nra.com, and asked the question, "Do you agree with the 2nd Amendment: the Right to Bear Arms"? 98% of the people surveyed said "Yes", and 2% said "No".