

**Content Standards:**

- To identify bias in sampling methods.

**Process Standards:**

- Students will share their opinions with others and consider the opinions of others.

**Task:**

Read the following situations and identify any bias in the sampling method. Explain why this represents a biased situation.

1. The editors of Martha Stewart Living magazine want to determine the public approval rating for their founder, Martha Stewart. They decide to send out surveys to their subscribers for this feedback, of which 850 are returned.

2. To project the winner of the mayoral election, a reporter polls voters as they exit the polling booth in his neighborhood and asks them who they voted for. He finds that some people do not wish to give out that information.

3. On the twelfth anniversary of the death of Elvis Presley, a Dallas record company sponsored a national call-in survey. Listeners of over 1000 radio stations were asked to call a 1-900 number (at a charge of \$2.50) to voice an opinion concerning whether or not Elvis was really dead. It turned out that 56% of callers felt Elvis was alive.

4. In 1936, *Literary Digest* magazine conducted the most extensive (to that date) public opinion poll in history. They mailed out questionnaires to over 10 million people, whose names and addresses they had obtained from the telephone books and vehicle registration lists. More than 2.4 million people responded, with 57% indicating that they would vote for Republican Alf Landon in the upcoming Presidential election. (Incumbent Democrat Franklin Roosevelt won the election, carrying 63% of the popular vote. HINT: Who do you think had telephones and vehicles in 1936?)

5. You are collecting information on the type of food people like to eat when they are shopping in a mall. You decide to ask every fifth person who walks by you, as long as they look like they wouldn't mind being interviewed.

6. You are interested in learning what percentage of women hold full-time jobs while raising a family. You decide to conduct random telephone interviews, using your local telephone directory each morning for one week.