

## Indicators

### Objective:

#### 4.06 Design and conduct experiments or surveys to solve problems; report and analyze results.

Vocabulary and Resources	
sample space	representative sample
theoretical probability	experimental results

**A.** Design and conduct a survey. Explain the purpose of the survey, question(s) used, and procedure you followed. Display the data collected in an appropriate format and analyze the results.

**B.** Jenn is the head cheerleader at her school. She is thinking of running for student council and decides to survey the other cheerleaders and ask them if they would vote for her in the upcoming student council election. Will this sample give her the information she needs? Explain.

**C.** Taylor is playing a game that requires her to roll four fair number cubes and record the sum of the four numbers. Design an experiment to determine:

- the probability that the sum will be less than 15;
- the probability that the sum will be an even number.

How many trials do you think you would need to conduct to be fairly confident of your results?