

**Lesson 1.2** Calculating Probability

**Probability** can also be thought of as the ratio of desired outcome(s) to the sample space. It can be expressed as a ratio, fraction, decimal, or percent.

When tossing a coin, what is the probability that it will land on heads?

desired outcome: heads    sample space: heads, tails    probability: 1:2,  $\frac{1}{2}$ , 50%, 0.5

Find the probability. Write answers as fractions in simplest form.

A box contains 3 red pencils, 4 blue pencils, 2 green pencils, and 1 regular pencil. If you take 1 pencil without looking, what is the probability of picking each of the following?

1. a red pencil  $\frac{3}{10}$  \_\_\_\_\_

2. a blue pencil  $\frac{2}{5}$  \_\_\_\_\_

3. a green pencil  $\frac{1}{5}$  \_\_\_\_\_

4. a regular pencil  $\frac{1}{10}$  \_\_\_\_\_

If you spin the spinner shown at the right, what is the probability of the spinner stopping on each of the following?

5. a letter  $\frac{1}{2}$  \_\_\_\_\_

6. an odd number  $\frac{1}{3}$  \_\_\_\_\_

7. an even number  $\frac{1}{6}$  \_\_\_\_\_

8. a vowel  $\frac{1}{6}$  \_\_\_\_\_

9. the number 3  $\frac{1}{6}$  \_\_\_\_\_

10. a consonant  $\frac{1}{3}$  \_\_\_\_\_

