

PER: \_\_\_\_\_

### Basic Probability Word Problems

The probability (or chance) of a particular event happening is the ratio of the number of ways in which this event can happen to the total number of events.

The set  $S$  of all possible outcomes of some event is called the *sample space*. For example, if you toss a die the possible outcomes are 1, 2, 3, 4, 5, or 6. The sample space for tossing a die once is:

$$S = \{1, 2, 3, 4, 5, 6\}$$

The probability of an event  $A$  is defined as:

$$P(A) = \frac{\text{number of ways that the event } A \text{ can occur}}{\text{number of ways that the sample space can occur}}$$

NOTE:

- There are 52 cards in a deck, 13 each of hearts, spades, clubs, and diamonds.
- Ace, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, JACK, QUEEN, KING.

## Basic Probability Problems

(Answer ID # 0131276)

Determine the probability for each.

- \_\_\_\_\_ Drawing 2 cards that are all queen from a deck of cards?
- \_\_\_\_\_ Drawing a black card from a deck of cards?
- \_\_\_\_\_ Drawing a diamond from a deck of cards?
- \_\_\_\_\_ Rolling an even number on a die?
- \_\_\_\_\_ Drawing a jack from a deck of cards?
- \_\_\_\_\_ Rolling an odd number on a die?
- \_\_\_\_\_ Drawing 2 cards that are all 9 from a deck of cards?
- \_\_\_\_\_ Drawing a spade from a deck of cards?
- \_\_\_\_\_ Drawing a king from a deck of cards?
- \_\_\_\_\_ Drawing 3 cards that are all 9 from a deck of cards?