## **Definitions:**

The Addition Rule: pg. 252

Mutually Exclusive: pg. 253

## Examples:

**Genetics:**  $\# 2_{PB} 255$  In one generation of plants, 1/4 of the plants have white flowers, 1/4 of the plants are short, and 1/16 of the plants are short and have white flowers. What is the probability that a random plant from this generation will be short or will have white flowers?

A Deck of Cards: One card is drawn at random from a deck of cards. What is the probability that the card will be

- (a) a spade or a king?
- (b) not be a space or a king?
- (c) a face card or an ace?
- (d) a king, queen, or ace?

**Finding P(A and B):** #15 pg. 266 One-third of the children in a class like hot dogs, 1/2 like pizza, and 3/4 like hot dogs or pizza. What is the probability that a randomly selected child in a class likes both hot dogs and pizza?