

## Section 4-5: Probability

**Probability:** The measure of how likely it is something is going to happen.

Probabilities can be given as:

Ratio

Percent

Decimal

## Two types of Probability:

### Theoretical Probability

Uses your knowledge of the situation to predict the future outcome of an event.

$$\text{Theoretical Probability} = \frac{\text{\# favorable outcomes}}{\text{total possible outcomes}}$$

### Experimental Probability

Uses the results of an experiment to predict the future outcome of an event.

$$\text{Experimental Probability} = \frac{\text{\# times an event actually occurs}}{\text{\# times experiment was done}}$$

You will spin the spinner shown one time. Find each probability as a fraction.

1.  $P(\text{odd}) = \frac{4}{8}$

2.  $P(\text{Multiple of 3}) = \frac{2}{8}$

