

Name: _____ Date: _____

Probability

What is Probability?

Probability is the chance that a favorable outcome will occur in an event. (certain)

Example:

Rolling a 2 after rolling a die one time

How do we find probability of a given event?

1. First, we need to find two numbers.

a. Number of favorable outcomes (what we want)

Example:

There is 1 number 2 on a die

b. Total number of possible outcomes.

Example:

There are 6 numbers on a die

2. Then, create a fraction with these numbers that looks like this:

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

Example:

$$\frac{1}{6}$$

3. Finally, write your answer in one of three appropriate ways:

a. fraction

Example

$$\frac{1}{6}$$

b. ratio

Example

1:5 (said 1 to 5)

c. percent chance

Example

$$\left(\frac{1}{6}\right) \times 100 = \text{percent chance} = 16.7\%$$