## Probability Name

## Probability- How likely an event is to

 occur. Can be written as a $\qquad$ , or- Always on or between 0 and 1


Impossible
certain

> Example: What is $\mathrm{P}($ green $)$ ? $$
1 / 4, .25 \text { or } 25 \%
$$



Outcomes-all choices that may occur.

Fraction form of probability:

Chance of specific outcome total \# of outcomes

Theoretical Probability-What." mathematically
Experimental Probability- What
occurs in a trial or experiment

## Simple event -_ 1 __ with 1 outcome.

Ex. Flip a coin- get head or tail Roll a die-get a $1,2,3,4,5$, or 6
Compound event- sequence of simple events with $\qquad$ -
Ex. List all of the possible outcomes that can occur if you flip a coin and roll a die. (hint: draw a tree diagram-later notes)

Sample Space-List of all $\qquad$ outcomes Ex. Flip a coin $S=\{H, T\}$

Complements of an event- The $\qquad$ of an event. The set of outcomes $\qquad$ included in the event. $P\left(A^{\prime}\right)$ read $P($ not $A)$
$P\left(A^{\prime}\right)=1-P(A)$
Ex. Roll a die $P\left(5^{\prime}\right)=1-P(5) \quad 1-1 / 6=5 / 6$

