Probability Vocabulary

Probability: The likelihood or chance of an event occurring.

The probability of an event is equal to the number of favourable outcomes divided by the number of possible outcomes.

$$P(event) = \frac{number\ of\ favourable\ outcomes}{number\ of\ possible\ outcomes}$$

Probability is represented with a fractional number between 0 and 1 (or 0% to 100%).

The closer to 1, the more likely the event is to occur.
An event is certain to occur if it has a probability of 1 (100%)

The closer to 0, the less likely the event is to occur.
An event is impossible if its probability is equal to 0 (0%).

0	¼	½	¾	1
0	0.25	0.5	0.75	1
0 %	25 %	50 %	75 %	100 %
Impossible	Unlikely	Even	Likely	Certain
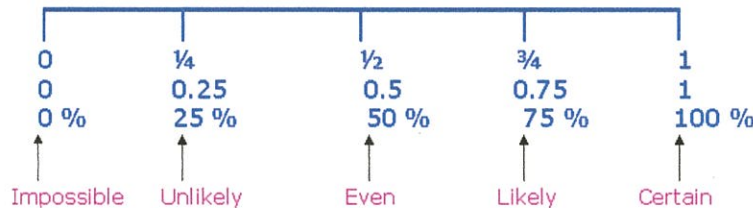
100%		certain
93%	Give or take about 6%	Almost certain
75%	Give or take about 12%	Probable
50%	Give or take about 10%	Chances about even
30%	Give or take about 10%	Probably not
7%	Give or take about 5%	Almost certainly not
0%		Impossible

Vocabulary

Permutation: is any arrangement of items or events.

Event: a single result of an experiment. Ex. Rolling an even number.

Simple event: a random experiment carried out in a single step.

Compound event: a random experiment carried out in many steps.

Theoretical probability: when we use a formula to find the probability of an event

Experimental probability: When you find the probability by doing an experiment.

Dependent events: occurs when the first step affects the other steps. No replacement.

Independents events: replacement. When one step does not affect the other.

Compatible: two events that occur at the same time or at least one outcome in common.

Incompatible: when there are no outcomes in common.

Complementary: if two incompatible events when combined result in the complete set of possible outcomes.

Random experiment: Is an experiment where we cannot foresee the outcome with certainty.

Or → add the fractions
And or followed by → multiply the fractions