PROBABILITY

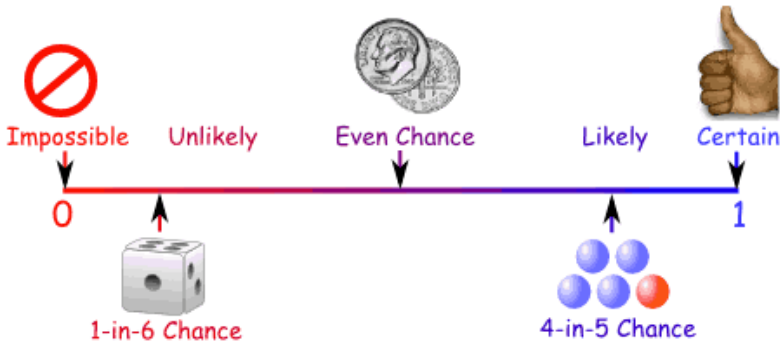
*How **likely** something is to happen.*

Likelihood How likely it is for something to happen.

Outcome One result of an event or experiment.

Probability Line

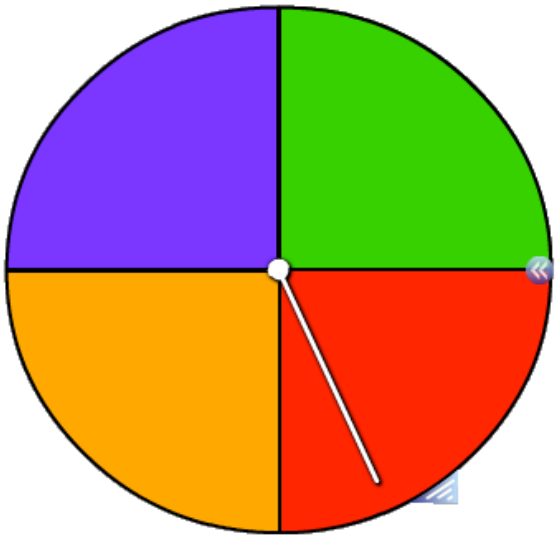
We can show probability on a Probability Line :



Probability is always between 0 and 1

PROBABILITY

*How **likely** something is to happen.*



$\frac{1}{4} = 25\%$

PROBABILITY

I WIN IF I ROLL A 3

6 SIDED DICE

THEORETICAL PROBABILITY

$$= \frac{\#\text{ of WANTED OR FAVOURABLE OUTCOMES}}{\#\text{ of POSSIBLE OUTCOMES}}$$

$$= \frac{1 \text{ (CAN ONLY WIN WITH 3)}}{6 \text{ (POSSIBLE OUTCOMES)}}$$

$$= \frac{1}{6} \rightarrow = 17\%$$

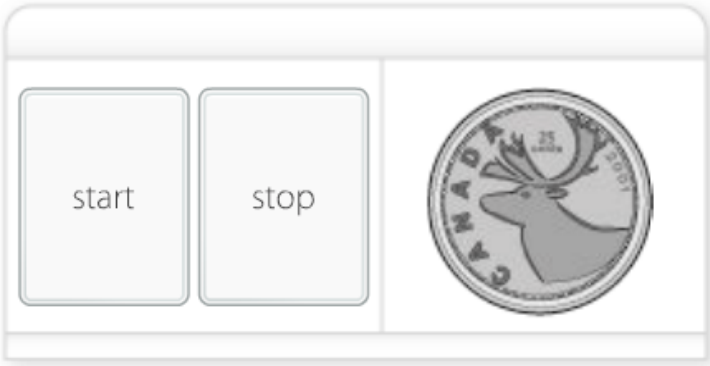
	OUTCOMES
1	III
2	I
3	III
4	II
5	
6	I

OF TRIALS = 10

EXPERIMENTAL PROBABILITY

$$= \frac{\#\text{ OF TIMES I ROLLED A 3}}{\#\text{ OF TIMES I DID THE EXPERIMENT}}$$

$$= \frac{3}{10} \rightarrow = 30\%$$



HEADS	TAILS
𝍸 𝍸	𝍸 ||||
1	9
11	55
20	100
	9
	20

IN THEORY:

50% → 10 HEADS
10 TAILS

EXPERIMENT

11 HEADS → 55%
9 TAILS → 45%