



### Basic Terminology

- Probability = likelihood
- Sample space
- Trial
- Event

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### Calculating Probability of Events

#### 1. Equally likely outcomes

- Trial: Roll a dice (fair 6-sided dice)

A = even outcome = {2, 4, 6}

B = outcome  $\leq 2$  = {1, 2}

- Trial: Flip and record the results of 2 coins. What is the probability of getting 2 Hs?

**2. Non-equally likely outcomes & weighting**

- Trial: Roll a loaded 6-sided dice where

Outcome	1	2	3	4	5	6
p	$\frac{3}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$

A = even outcome

B = outcome  $\leq 2$

- Trial: Without looking inside, pick an item out a box containing: 1 pecan, 2 almonds, 3 cashews, and 5 peanuts. What is the probability of getting an almond at random?