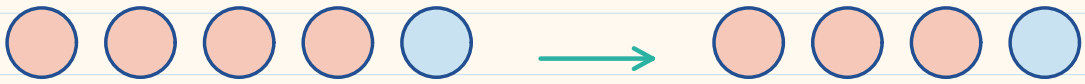
Likelihood and possible outcomes

Probability · VC2M4P01

Chance describes what could happen and how likely it is.



4 red + 1 blue → 3 red + 1 blue

Remove a red counter: the next chance changes.

☆ List the possible outcomes

A fair die: 1, 2, 3, 4, 5 and 6 are equally likely.

Rolling 7 is impossible; rolling less than 7 is certain.

On a fair coin, heads and tails each have an even chance.

☆ Order events by likelihood

Roll: 7 → 6 → even → below 6 → below 7 (a fair die).

Least → most: impossible, unlikely, even chance, likely, certain.

Below 6 has 5 winning outcomes; below 7 has all 6.

☆ Independent or dependent?

Independent: one outcome does not affect another's chance.

Fair coin flips: after 5 heads, the next flip is still an even chance.

Dependent: one outcome changes another's chance.

☆ Other chance situations

Remove a red counter without replacing it: chances change.

A storm makes an outdoor picnic less likely.

Mutually exclusive: one card cannot be both red and a spade.

Remember...

Likely does not mean certain. Unlikely does not mean impossible.

List combinations systematically: 2 tops × 3 shorts = 6 outfits.