

# Probability

Probability is the measure of the likelihood that a particular event will occur.

Probability is quantified as a number between 0 and 1 (where 0 indicates impossibility and 1 indicates certainty). The higher the probability of an event, the more certain we are that the event will occur. A simple example is the toss of a fair (unbiased) coin. Since the two outcomes are equally probable, the probability of 'heads' is equal to the probability of 'tails'. Therefore, the probability of either 'heads' or 'tails' is  $1/2$  (or 50%).