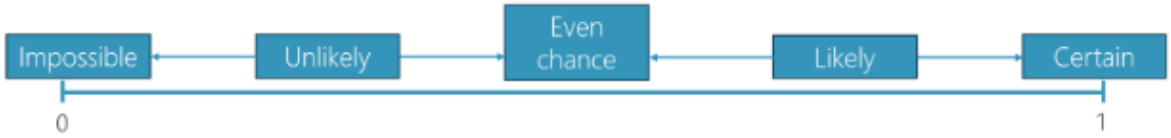
Key words and symbols: what I need to say and write accurately

Word	Explanation
systematic	working in an organised way
relative frequency	the proportion of times something happens
outcome	a result we could get from a probability experiment e.g. rolling a fair six-sided die gives the outcomes 1, 2, 3, 4, 5, and 6
event	one or more outcomes e.g. rolling a square number on a die
fair	all outcomes are equally likely
biased	some outcomes are more likely than others
mutually exclusive	events which cannot happen at the same time
independent	If events are independent, they do not influence or affect each other. e.g. if I flip a coin twice, the outcome of the first flip has no effect on the outcome of the second flip: the events are independent.

Fingertip facts: what I need to learn by heart

$$P(\text{event}) = \frac{\text{outcomes we want}}{\text{total outcomes}}$$

Probabilities can be represented by a number between 0 and 1.



The sum of all mutually exclusive events is 1.

If events A and B are mutually exclusive, $P(A \text{ or } B) = P(A) + P(B)$

$P(\text{not } A) = 1 - P(A)$. This can also be written $P(A') = 1 - P(A)$