



Year 9 Maths Learning Journey

Summer Term 4

Representations and revision: Probability

Core knowledge	
Single event probability (R) “Are the outcomes of the events equally likely or not? How do you know?”	WORKSHEET
Relative frequency - including convergence “How do you work out a relative frequency? Why is it different from a probability?”	WORKSHEET
Expected outcomes “How do you work out the expected frequency of a particular outcome?”	WORKSHEET
Independent events “What does it mean for two events to be independent?”	WORKSHEET
Use tree diagrams (H) “How many branches will this tree diagram need? How do you know?”	WORKSHEET
Use tree diagrams to solve without replacement problems (H) “Why do probabilities change between trials? How do they change?”	WORKSHEET
Use diagrams to work out probabilities “How do you set up a two-way table? What values do you know and what can you find?”	WORKSHEET

Learning Checkpoints

LC Title	Completed	Dirt
Probability		

Key Vocabulary

Affect: emphasizes the relations between emotions and other affective variables.

Biased: A systematic (built-in) error which makes all values wrong by a certain amount.

Equally likely: In an experiment (trial in statistics) the result is the outcome.

Event: A possible outcome of a statistical trial, for example 'heads' when a coin is tossed.

Expected outcome: statements that describe what we expect. participants/customers/learners to learn and achieve.

Experiment: a scientific procedure undertaken to make a discovery, test a hypothesis, or demonstrate a known fact.

Fair: impartial and just, without favouritism or discrimination.

Frequency: The number of times an event occurs; or the number of individuals

Independent events: Two events are independent if the occurrence of one event does not affect the chances of the occurrence of the other event.

Intersection: The elements that are common to two or more sets

Outcome: a possible result of an experiment or trial

Probability: the likelihood or chance of an event occurring

Product: The result of multiplying one number by another.

Relative frequency: How often something happens divided by all outcomes.

Sample space: The sample space is the set of all possible outcomes of a trial. The sum of all the probabilities for all the events in a sample space is 1.

Trial: test (something, especially a new product) to assess its suitability or performance.

Two way tables: A table in which the rows represent the categories for one category variable, the columns represent the categories of a second category variable

Unbiased: To be unbiased, you have to be 100% fair — you can't have a favourite, or opinions that would colour your judgment.

Union: The union of two sets A and B is written as $A \cup B$.

Venn diagram: a diagram representing mathematical or logical sets pictorially as circles or closed curves within an enclosing rectangle (the universal set), common elements of the sets being represented by intersections of the circles.