Assignment Title	Probability	Date set	Summer 1	Hours	20

Summary of Unit 6	Key Words
Use standard probability notation Calculate probabilities of combined events, and repeated events Calculate with conditional probability	Probability, chance, impossible, likely, even chance, unlikely, certain, sample, population, experimental, theoretical, sample space, tree diagrams, Venn diagrams, variables, conditional probability, mutually exclusive, exhaustive events, dependant events, independent events

Prior Knowledge

There are six counters in a bag. Three counters are red, two counters are green and one counter is blue.

R R R G G B

Nick takes at random a counter from the bag.

(a) Circle the word that best describes the likelihood that Nick takes a blue counter.
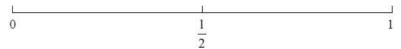
impossible   unlikely   even   likely   certain

(b) On the probability scale, mark with a cross (X) the probability that Nick takes a red counter.
(c) On the probability scale mark with a cross (X) the probability of getting a white counter

0            $\frac{1}{2}$ 1

There are 3 boys and 3 girls on a school council.

Boys	Girls
Alfie	Denise
Brian	Emily
Cliff	Freya

A teacher wants to choose one of the boys and one of the girls to go to a meeting.
List all the possible combinations the teacher can choose.

LEARNING JOURNEY

Level	Task Description
1-2	Compare the probability using ng the 0-1 or 1- 100% scale and statements of likelihood
2	Use fractions, decimals and percentages to represent probabilities Use probability values to calculate expected frequency
2	Use collected data and calculated probabilities to determine and interpret risks Compare data with theoretical predictions to identify bias within experimental design
3	Understand that increasing sample size generally leads to better estimates of probability and population parameters
4-5	Use two-way tables, sample spaces, tree and Venn diagrams to represent all the different outcomes for at most three events
5	Understand mutually exclusive and exhaustive events, and use the addition rule for mutually exclusive events
7	Understand what it means for two events to be independent Use the multiplication laws for independent events Know that for independent events A and B, P(A) = P(A|B)