



What should I already know?

- How to identify and represent sets
- How to interpret and create Venn diagrams
- How to understand and use the intersections of sets
- How to understand and use the union of sets
- How to understand and use the complement of a set
- Know and use the vocabulary of probability
- How to generate sample spaces for single events
- How to calculate the probability for a single event
- How to understand and use the probability scale
- Know that the sum of probabilities for all possible outcomes is 1

What will I know by the end of the unit?

- How to construct sample spaces for one or more events
- How to find probabilities from a sample space diagram
- How to find probabilities from two-way tables
- How to find probabilities from venn diagrams
- How to use the product rules for finding the total number of possible outcomes

Vocabulary

Outcomes	Event	Denominator	Region
Sample space	Equally likely	Set	Total
Sets	Unbiased	And	Possibilities
Probability	P(event)	Or	Product
Systematic	Two-way table	Intersection	Table
Chance	Sample	Union	Order

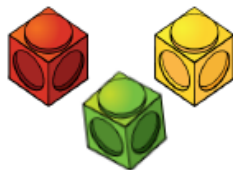
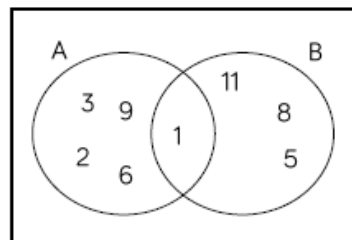
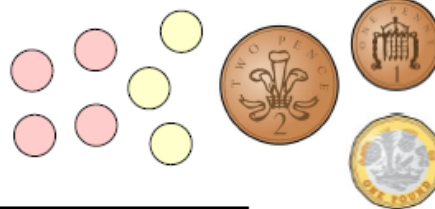
Investigate/Homework tasks

- Homework will be set by your teacher using google classroom
- You should complete at least 30 minutes of maths tasks using the website and log in provided by your teacher. Please attend help sessions if you do not have access to the internet at home
- Additional work you could complete:
 - Find out more about the meaning of the vocabulary list using <http://www.amathsdictionaryforkids.com/>
- To challenge yourself: Answer the key questions to deepen your knowledge

Key Information/Diagrams

Key Representations

	Boys	Girls	Total
Year 8			
Year 9			
Total			



	H	T
H	HH	HT
T	TH	TT

Key Questions

What is a sample space and how can you ensure you have listed all possible outcomes in your sample space?
Why is being systematic important when listing outcomes?

How can you determine what method or type of sample space diagram to use?

What does $P(\text{event})$ mean?

Is it possible to write a probability as 'out of' or as a ratio? Why not?

What are the equivalent different ways of writing a probability?

Can probabilities be simplified? Why/Why not?

How can a two-way table be used to calculate a probability?

How do you decide which row or column to look at?

How do you design a two-way table?

How do the words 'and/or' relate to set notation and regions on a Venn diagram?

Why do we start with the intersection of sets when adding information to a Venn diagram?

How can you find the total number of arrangements without listing each one?

Is commutativity important when working out the total number of arrangements? Why/Why not?

How can factors help when finding lists that have a specified number of arrangements?