

"Our curriculum is designed to help students truly master mathematics, so they can apply their skills in unfamiliar situations whenever needed. Topics from the same content areas have been grouped together to form mastery half terms. More time is spent teaching fundamentals to avoid reteaching in later years."

Autumn 1: Probability	
<b>Skills</b>	<ul style="list-style-type: none"> <li>● Convert between fractions, decimals and percentages</li> <li>● Determine theoretical probabilities</li> <li>● Calculate relative frequency and experimental probability</li> <li>● Use probability and relative frequency to find an expected number of outcomes</li> <li>● Find probabilities of single and combined events</li> <li>● Use representations such as two way tables and tree diagrams to solve probability problems</li> <li>● Use the language and notation of set theory, including union and intersection</li> <li>● Use Venn diagrams to represent sets</li> <li>● Calculate probabilities from Venn diagrams</li> </ul>
<b>Knowledge</b>	<ul style="list-style-type: none"> <li>● Understand the equivalence between fractions, decimals and percentages</li> <li>● Understand how probability is used to discuss uncertainty</li> <li>● Use the language of probability, including 'event', 'outcome', 'trial', 'experiment' etc.</li> <li>● Know that probabilities are represented by numbers between 0 and 1, where 0 represents impossibility and 1 represents certainty</li> <li>● Recognise the differences between situations involving single and combined events</li> <li>● Understand and use the addition and multiplication rules for independent and dependent events</li> <li>● Begin to understand and reason with conditional probability</li> </ul>
<b>Rationale</b>	<p>In this module learners briefly revise the equivalence of fractions, decimals and percentages before studying probability and set theory.</p> <p>Learners begin by considering uncertainty and the language of probability in the context of idealised experiments and real contexts before considering combined events. Learners encounter a variety of tools and representations, including bar models and tree diagrams.</p> <p>This learning is formalised and extended in unit 3, where students encounter set theory for the first time, and use Venn diagrams to represent them. Venn diagrams are also explored thoroughly, consolidating learning from Year 7 and 8. Venn diagrams are used as a model to think about conditional probability.</p>