

## Year 10 Mathematics - Foundation

### Learning Programme 4

<p>The LORIC skill focus for this LP is: INITIATIVE.</p> <p>The Moral Virtues focus for this LP are: INTEGRITY and GRATITUDE.</p> <p>Integrity - Having strong moral principles.</p> <p>Gratitude - Feeling and expressing thanks.</p> <p><b>What will I be learning about in this Learning Programme?</b> In LP4 I will be learning about ratio, proportion, percentages and probability.</p> <p><b>Where have I seen this learning before?</b> KS3: Fractions, decimals, percentages, ratio, probability.</p> <p><b>What could I use it for?</b> The knowledge and skills I will learn in this learning programme will allow me to solve ratio, fraction and percentage problems and find probabilities using tables, Venn diagrams, frequency trees, tree diagrams and sample space diagrams.</p>	<p><b>Literacy:</b></p> <ul style="list-style-type: none"> <li>• Capital letters must be used at the start of sentences and for the first letter of proper nouns</li> <li>• Full stops must be used at the end of a sentence</li> <li>• Question marks must be used at the end of a question</li> <li>• Apostrophes should only be used for possession or omission</li> <li>• Days of the week and months must be spelled correctly</li> <li>• Key words must be spelled correctly</li> </ul>
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In LP4.1, I will know:	04/03/24 - (WK 1)	Key Vocabulary	Homework
how to draw and understand addition of vectors; how to draw and understand addition and subtraction of vectors.		Vector	LP3 consolidation Sparx Maths
In LP4.2, I will know:	11/03/24 - (WK 2)	Key Vocabulary	Homework
how to use ratios and fractions to make comparisons; how to link ratios and graphs.		Ratio	LP4:1 Topics plus consolidation Sparx Maths
In LP4.3, I will know:	18/03/24 - (WK 1)	Key Vocabulary	Homework
how to solve problems with currency conversion; how to use and interpret ratios of the form 1: n and n:1; how to solve 'best buy' problems.		Exchange	LP4:2 Topics plus consolidation Sparx Maths
Extended Task.			
In LP4.4, I will know:	25/03/24 - (WK 2)	Key Vocabulary	Homework
how to combine a set of ratios; how to link ratio and algebra; how to solve mixed ratio problems.		Proportion	LP4:3 Topics plus consolidation Sparx Maths
In LP4.5, I will know:	15/04/24 - (WK 1)	Key Vocabulary	Homework
how to calculate simple and compound interest; how to solve repeated percentage change problems.		Multiplier	LP4:4 Topics plus consolidation Sparx Maths
In LP4.6, I will know:	22/04/24 - (WK 2)	Key Vocabulary	Homework
how to solve problems involving growth and decay; how to solve problems involving percentages, ratios and fractions.		Decay	LP4:5 Topics plus consolidation Sparx Maths
Extended Task.			
In LP4.7, I will know:	29/04/24 - (WK 1)	Key Vocabulary	Homework
how to use experimental data to estimate probabilities; how to find probabilities from tables, Venn diagrams and frequency trees.		Independent	LP4:6 Topics plus consolidation Sparx Maths
In LP4.8, I will know:	06/05/24 - (WK 2)	Key Vocabulary	Homework
how to calculate probability with independent events; how to use tree diagrams for independent events; how to use tree diagrams for dependent events.		Dependent	LP4:7 Topics plus consolidation Sparx Maths

PRT Task 1

PRT Task 2

**Resources to support learning:**  
Pupils have access to knowledge organisers, Mathswatch and Sparx Maths to further support them in their Mathematics revision beyond the classroom. All weekly homework tasks will be set on Sparx Maths and all questions have a video to support. Pupils can access any topic in the Independent Practice section on Sparx Maths. Sparx Maths has been introduced to the pupils by their teachers and their login details should be written in their planner.

**FFET Award Challenge for this Learning Programme:**  
Complete 4 XP Boost Tasks on Sparx Maths