

Year 12 Mathematics SMV

Learning Programme 5

<p>The LORIC skill focus for this LP is: COMMUNICATION.</p> <p>The Moral Virtues focus for this LP are: COURAGE and HUMILITY.</p> <p>Courage - Acting with bravery and overcoming fears.</p> <p>Humility - Having a modest view of oneself.</p> <p>What will I be learning about in this Learning Programme? In LP5 I will be learning about algebraic and partial fractions, variable accelerations and moments.</p> <p>Where have I seen this learning before? Year 12: Resolving forces, differentiation and integration.</p> <p>What could I use it for? The knowledge and skills I will learn in this learning programme will allow me to solve problems involving forces and moments. I will also learn how to use polynomial division and partial fractions to solve equations involving fractions.</p>	<p>Literacy:</p> <ul style="list-style-type: none"> • Capital letters must be used at the start of sentences and for the first letter of proper nouns • Full stops must be used at the end of a sentence • Question marks must be used at the end of a question • Apostrophes should only be used for possession or omission • Days of the week and months must be spelled correctly • Key words must be spelled correctly
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<p>In LP5.1, I will know:</p> <p>how to use proof by contradiction; how to manipulate algebraic fractions.</p>	<p>13/05/24 - (WK 1)</p>	<p>Key Vocabulary</p> <p>Contradiction</p>	<p>Homework</p> <p>Proof</p>
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<p>In LP5.2, I will know:</p> <p>how to manipulate partial fractions; how to use algebraic division; how to write improper fractions as partial fractions.</p>	<p>20/05/24 - (WK 2)</p>	<p>Key Vocabulary</p> <p>Divisor</p>	<p>Homework</p> <p>Partial Fractions</p>
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<p>In LP5.3, I will know:</p> <p>how to solve variable acceleration problems using differentiation; how to solve variable acceleration problems using integration.</p> <p>Extended Task.</p>	<p>03/06/24 - (WK 1)</p>	<p>Key Vocabulary</p> <p>Acceleration</p>	<p>Homework</p> <p>Variable Acceleration</p>
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<p>In LP5.4, I will know:</p> <p>how to solve problems involving moments; how to solve problems involving equilibrium.</p>	<p>10/06/24 - (WK 2)</p>	<p>Key Vocabulary</p> <p>Equilibrium</p>	<p>Homework</p> <p>Moments</p>
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<p>In LP5.5, I will know:</p> <p>how to solve problems involving tilting; how to solve problems involving non-uniformed rods.</p>	<p>17/06/24 - (WK 1)</p>	<p>Key Vocabulary</p> <p>Non-uniformed</p>	<p>Homework</p> <p>Rods</p>
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<p>In LP5.6, I will know:</p> <p>how to solve lamina problems.</p> <p>Extended Task.</p>	<p>24/06/24 - (WK 2)</p>	<p>Key Vocabulary</p> <p>Lamina</p>	<p>Homework</p> <p>Laminas</p>
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<p>In LP5.7, I will know:</p> <p>how to resolve forces; how to solve problems involving friction.</p>	<p>01/07/24 - (WK 1)</p>	<p>Key Vocabulary</p> <p>Friction</p>	<p>Homework</p> <p>Friction</p>
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<p>In LP5.8, I will know:</p> <p>how to solve problems involving friction.</p>	<p>08/07/24 - (WK 2)</p>	<p>Key Vocabulary</p> <p>Resultant</p>	<p>Homework</p> <p>Resolving Forces</p>
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<p>Resources to support learning:</p> <p>Use your knowledge organisers to support with revision and recall. Here are some online resources to further support you in your Mathematics revision beyond the classroom. All weekly homework tasks area based on the exercises from the book. In addition to homework. Some useful websites are listed below:</p> <p>- Online Resource for homework and exam practice: https://www.drfrostmaths.com/</p> <p>- Topic based exam questions - https://www.mathsgenie.co.uk/</p>

<p>FFET Award Challenge for this Learning Programme:</p> <p>Complete an AS Paper as part of your revision</p>
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PRT Task 1

PRT Task 2