

Year 13 Mathematics Pure Learning Programme 4

<p>The LORIC skill focus for this LP is: INITIATIVE. The Moral Virtues focus for this LP are: INTEGRITY and GRATITUDE.</p> <p>Integrity - Having strong moral principles. I will show integrity by taking responsibility for my actions. Gratitude - Feeling and expressing thanks. I will show gratitude by saying please and thank you.</p> <p>What will I be learning about in this Learning Programme? In LP4 I will be learning about integration and vectors.</p> <p>Where have I seen this learning before? Year 12: Polynomial 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 calculus problems and apply this to differential equations. These skills are important for future courses and careers in engineering.</p>		<p>Literacy Non-Negotiables:</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 Vocabulary to be taught using the Frayer model
<p>In LP4.1, I will know: 09/03/26 - (WK 2)</p> <p>how to use vectors in 3-dimensions; how to solve rates of change problems.</p>	<p>Frayer Model Words</p> <p>Rates of Change</p>	<p>Homework</p> <p>Targeted Exam Paper Practice</p>
<p>In LP4.2, I will know: 16/03/26 - (WK 1)</p> <p>how to solve geometric problems using vectors; how to integrate non-polynomial functions; how to integrate functions of the form $f(ax+b)$.</p>	<p>Frayer Model Words</p> <p>Integration</p>	<p>Homework</p> <p>Targeted Exam Paper Practice</p>
<p>In LP4.3, I will know: 23/03/26 - (WK 2)</p> <p>how to use trigonometric identities with integration; how to solve problems using integration by substitution.</p> <p>Extended Task.</p>	<p>Frayer Model Words</p> <p>Identity</p>	<p>Homework</p> <p>Targeted Exam Paper Practice</p>
<p>In LP4.4, I will know: 13/04/26 - (WK 1)</p> <p>how to find the area under a curve using integration; how to solve problems using integration by parts.</p>	<p>Frayer Model Words</p> <p>Constant</p>	<p>Homework</p> <p>Targeted Exam Paper Practice</p>
<p>In LP4.5, I will know: 20/04/26 - (WK 2)</p> <p>how to find the area under a curve using integration; how to use the trapezium rule to approximate the area under a curve.</p>	<p>Frayer Model Words</p> <p>Trapezium Rule</p>	<p>Homework</p> <p>Targeted Exam Paper Practice</p>
<p>In LP4.6, I will know: 27/04/26 - (WK 1)</p> <p>how to solve differential equation problems; how to write integration as a limit of a sum; how to integration parametric equations.</p> <p>Extended Task.</p>	<p>Frayer Model Words</p> <p>Limit of a Sum</p>	<p>Homework</p> <p>Targeted Exam Paper Practice</p>
<p>In LP4.7, I will know: 04/05/26 - (WK 2)</p> <p>how to apply all knowledge acquired so far to exam questions.</p>	<p>Frayer Model Words</p> <p>Differentiation</p>	<p>Homework</p> <p>Targeted Exam Paper Practice</p>
<p>Resources to support learning: 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, Pupils should use questions not used in class plus the review exercises to help support learning from outside the classroom. Online Resource for homework and exam practice: https://www.drfrostmaths.com/. Topic based exam questions - https://www.mathsgenie.co.uk/</p>		
<p>FFET Award Challenge for this Learning Programme: Complete one of the Bicen Maths "Road to Exams" sessions, providing evidence by taking notes and showing all of your working out.</p>		

