

## Year 12 Mathematics Pure/Statistics Learning Programme 4

<p>The LORIC skill focus for his LP is: INITIATIVE. The Moral Virtues focus for this LP are: INTEGRITY and GRATITUDE.</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>
<p>Integrity - Having strong moral principles. 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 exponentials, logarithms and statistics.</p> <p><b>Where have I seen this learning before?</b> GCSE: laws of indices and data handling.</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 statistical analysis problems. This knowledge will be used in careers in the medical field.</p>		

<b>In LP4.1, I will know:</b>	<b>10/03/25 - (WK 2)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to interpret exponential functions; how to solve modelling problems using exponentials.		Exponential	Exponentials

<b>In LP4.2, I will know:</b>	<b>17/03/25 - (WK 1)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to interpret logarithms; how to use the laws of logarithms.		Logarithm	Logarithms

<b>In LP4.3, I will know:</b>	<b>24/03/25 - (WK 2)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to solve equations involving logarithms.		Power	Logarithms
Extended Task.			

<b>In LP4.4, I will know:</b>	<b>31/03/25 - (WK 1)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to solve equations involving natural logarithms; how to use logarithms to interpret non-linear data.		Non-linear	Natural Logarithms

<b>In LP4.5, I will know:</b>	<b>21/04/25 - (WK 2)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to interpret exponential models in statistics; how to solve correlation and regression problems.		Correlation	Correlation and Regression

<b>In LP4.6, I will know:</b>	<b>28/04/25 - (WK 1)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to use hypothesis testing with zero correlation.		Hypothesis Testing	Hypothesis Testing
Extended Task.			

<b>In LP4.7, I will know:</b>	<b>05/05/25 - (WK 2)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to interpret and use set notation; how to calculate with conditional probability.		Conditional Probability	Probability

**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/>

**FFET Award Challenge for this Learning Programme:**  
Create a revision mind/map or poster of any of the Pure Maths chapters.

