Year 12 Mathematics Pure
Learning Programme 2

The LORIC skill focus for his LP is: ORGANISATION
The Moral Virtues focus for this LP are: COMPASSION and HONESTY
Compassion - the quality of feeling pity and concern for the sufferings or misfortunes of others.
Honesty - the quality of being truthful.

What will I be learning about in this Learning Programme?
In LP2 I will be learning about functions, straight line graphs and circles.

Where have I seen this learning before?
GCSE: transformations of graphs, circle theorems, gradient.

What could I use it for?
The knowledge and skills I will learn in this learning programme will allow me to solve algebraic problems using graphs as representations. These skills are used in engineering.

Literacy:
• 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

In LP2.1, I will know:	21/10/24 - (WK 2)	Key Vocabulary	Homework
how to locate points of intersection of two functions; how to translate graphs of functions.		Intersection	Functions

In LP2.2, I will know:	04/11/24 - (WK 1)	Key Vocabulary	Homework
how to draw transformations of functions on a graph; how to find and interpret the equation of a straight line.		Function	Transformations of Functions

LP2 RLW, I will:	11/11/24 - (WK 2)		
review my learning, recalling and applying key knowledge, and focus on closing any gaps in my knowledge.			

In LP2.3, I will know:	18/11/24 - (WK 1)	Key Vocabulary	Homework
how to find the equation of parallel and perpendicular lines; how to solve problems involving straight line graphs. Extended Task.		Perpendicular	Straight Line Graphs

PRT Task 1

In LP2.4, I will know:	25/11/24 - (WK 2)	Key Vocabulary	Homework
how to solve problems involving midpoints and perpendicular bisectors; how to find the equation of a circle.		Tangent	Equation of a circle

In LP2.5, I will know:	02/12/24 - (WK 1)	Key Vocabulary	Homework
how to find points of intersection between straight lines and circles; how to solve problems involving tangents and chords.		Chord	Tangents and Chords

In LP2.6, I will know:	09/12/24 - (WK 2)	Key Vocabulary	Homework
how to solve problems involving circles and triangles; how to simplify algebraic fractions. Extended Task.		Denominator	Algebraic Fractions

PRT Task 2

In LP2.7, I will know:	16/12/24 - (WK 1)	Key Vocabulary	Homework
how to divide a polynomial by another polynomial; how to use The Factor Theorem.		Polynomial	Factor Theorem

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:
Independently complete an exam question on a topic of your choice from LP2.