The Ellesmere Port C of E College

Part of the Frank Field Education Trust

Year 13 Mathematics
Learning Programme 3

The LORIC skill focus for his LP is: RESILIENCE
The Moral Virtues focus for this LP are: RESPECT and JUSTICE

Respect - treat others how you would wish to be treated yourself.
Justice - our College rules are fair and reasonable.

What will I be learning about in this Learning Programme?
In LP3 I will be learning about functions, Binomial expansion and iteration.

Where have I seen this learning before?
Year 12: Binomial expansion where the power is an integer, functions, transformation of simple functions.

What could I use it for?
The knowledge and skills I will learn in this learning programme will allow me to solve algebraic problems. These skills will be used in careers such as coding and computing.

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 LP3.1, I will know:	**06/01/25 - (WK 2)**	**Key Vocabulary**	**Homework**
how to use the modulus function; how to draw mappings of functions.		Function	Modulus Function
In LP3.2, I will know:	**13/01/25 - (WK 1)**	**Key Vocabulary**	**Homework**
how to work with composite functions.		Composite	Composite Functions
In LP3.3, I will know:	**20/01/25 - (WK 2)**	**Key Vocabulary**	**Homework**
how to solve inverse function problems; how to sketch the modulus of functions.		Modulus	Inverse Functions
In LP3.4, I will know:	**27/01/25 - (WK 1)**	**Key Vocabulary**	**Homework**
how to combine transformations of functions. Extended Task.		Transformation	Transformations
In LP3.5, I will know:	**03/02/25 - (WK 2)**	**Key Vocabulary**	**Homework**
how to use Binomial expansion when the power is fractional; how to use Binomial expansion when the power is negative.		Binomial	Binomial Expansion 1
In LP3.6, I will know:	**10/02/25 - (WK 1)**	**Key Vocabulary**	**Homework**
how to use partial fractions with Binomial expansion.		Partial Fractions	Binomial Expansion 2
LP2 RLW, I will:	**24/02/25 - (WK 2)**	**Key Vocabulary**	**Homework**
review my learning, recalling and applying key knowledge, and focus on closing any gaps in my knowledge.			Exam Paper
In LP3.7, I will know:	**03/03/25 - (WK 1)**	**Key Vocabulary**	**Homework**
how to locate roots of equations; how to use iteration. Extended Task.		Iteration	Iteration

PRT Task 1

PRT Task 2

Resources to support learning:

Pupils have access to knowledge organisers 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 a Maths exam paper from Maths Genie independently.