The Ellesmere Port C of E College

Part of the Frank Field Education Trust

Year 10 Mathematics
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 equations, formulae, inequalities and graphs.

Where have I seen this learning before?
KS3: solving equations, interpreting inequalities, formulae, lines parallel to the axes, expanding brackets and simple factorisation.

What could I use it for?
The knowledge and skills I will learn in this learning programme will allow me to solve algebraic problems with one or two variables this includes representing algebraic functions graphically. 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:	**19/10/26 - (WK 2)**	**Frayer Model Word**	**Homework**
how to simplify expressions; how to use the laws of indices including using negative indices; how to simplify expressions using indices.		Coefficient	Exam Questions
In LP2.2, I will know:	**02/11/26 - (WK 1)**	**Frayer Model Word**	**Homework**
how to expand and simplify expressions with brackets; how to factorise expressions.		Factorise	LP2:1 Topics plus consolidation Sparx Maths
LP2 RLW, I will:	**09/11/26 - (WK 2)**		
review my learning, recalling and applying key knowledge, and focus on closing any gaps in my knowledge.			Exam Questions
In LP2.3, I will know:	**16/11/26 - (WK 1)**	**Frayer Model Words**	
how to solve equations with unknowns on both sides; how to form and solve equations. Extended Task.		Variable	LP2:2 Topics plus consolidation Sparx Maths
In LP2.4, I will know:	**23/11/26 - (WK 2)**	**Frayer Model Word**	**Homework**
how to form and solve inequalities; how to use diagrams to represent inequalities.		Inequality	Exam Questions
In LP2.5, I will know:	**30/11/26 - (WK 1)**	**Frayer Model Word**	**Homework**
how to form and use formulae; how to rearrange formulae by changing the subject.		Rearrange	LP2:4 Topics plus consolidation Sparx Maths
In LP2.6, I will know:	**07/12/26 - (WK 2)**	**Frayer Model Word**	**Homework**
how to accurately plot straight line graphs; how to interpret the equation of a straight line; how to find the equation of a line from a graph. Extended Task.		Gradient	Exam Questions
In LP2.7, I will know:	**14/12/26 - (WK 1)**	**Frayer Model Word**	**Homework**
how to draw and interpret real life graphs; how to calculate the gradient of a real life graph.		Velocity	LP2:6 Topics plus consolidation Sparx Maths

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. They can simply search the following topics: equations, inequalities, straight line graphs and real life graphs.
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:

Create your own magic square using algebra. Ask your teacher for examples.