The Ellesmere Port C of E College

Part of the Frank Field Education Trust

Year 11 Crossover 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 transformations, algebraic fractions, circle theorems and trigonometry in right-angled triangles.

Where have I seen this learning before?
Year 10: Angles, Pythagoras' Theorem.

What could I use it for?
The knowledge and skills I will learn in this learning programme will allow me to solve algebraic and geometrical problems. 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 Words**	**Homework**
how to draw and describe reflections; how to draw and describe rotations; how to draw and describe translations using vector notation.		Invariant	Hannah Kettle Half Paper Paper 7
In LP2.2, I will know:	**02/11/26 - (WK 1)**	**Frayer Model Words**	**Homework**
how to enlarge a shape by a positive scale factor anywhere on a grid; how to enlarge a shape by a positive scale factor on a coordinate axis; how to enlarge a shape by a fractional scale factor on a coordinate axis.		Scale factor	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.			Hannah Kettle Half Paper Paper 9
In LP2.3, I will know:	**16/11/26 - (WK 1)**	**Frayer Model Words**	
how to form and solve linear equations requiring two or more steps; how to form and solve linear equations with unknowns on both sides; how to form and solve linear inequalities, including with unknowns on both sides, and represent the solutions one number line. Extended Task.		Variable	LP2:2 Topics plus consolidation Sparx Maths
In LP2.4, I will know:	**23/11/26 - (WK 2)**	**Frayer Model Words**	**Homework**
how to apply the knowledge learnt to date to my mock examinations.		Revision	Hannah Kettle Half Paper Paper 11
In LP2.5, I will know:	**30/11/26 - (WK 1)**	**Frayer Model Words**	**Homework**
how to apply the knowledge learnt to date to my mock examinations.		Revision	LP2:4 Topics plus consolidation Sparx Maths
In LP2.6, I will know:	**07/12/26 - (WK 2)**	**Frayer Model Words**	**Homework**
how to solve problems in 2D and 3D with Pythagoras' Theorem; how to solve problems using trigonometry with right-angled triangle. Extended Task.		Hypotenuse	Hannah Kettle Half Paper Paper 13
In LP2.7, I will know:	**14/12/26 - (WK 1)**	**Frayer Model Words**	**Homework**
how to identify and calculate with co-interior, alternate and corresponding angles; how to use the sum of exterior angles of any polygon and the sum of interior angles in polygons; how to represent, measure and read bearings and solve problems with bearings.		Co-interior	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: solving equations, transformations, trigonometry and angles.
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 a revision mind map for the topics taught in LP2. Include all key formulae and facts.