The Ellesmere Port C of E College

Part of the Frank Field Education Trust

Year 11 Higher 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 and non right-angled triangles.

Where have I seen this learning before?
Year 10: Right-angled trigonometry, angles.

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 Word**	**Homework**
how to describe reflections, rotations and translations; how to enlarge a shape by a positive or negative scale factor on a coordinate axis; including fractional scale factors.		Invariant	Hannah Kettle Half Paper Paper 7
In LP2.2, I will know:	**02/11/26 - (WK 1)**	**Frayer Model Word**	**Homework**
how to describe and perform combinations of transformations; how to transform functions.		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 calculate with fractions and mixed numbers; how to add and subtract with algebraic fractions; how to multiply and divide with algebraic fractions. Extended Task.		Hypotenuse	LP2:2 Topics plus consolidation Sparx Maths
In LP2.4, I will know:	**23/11/26 - (WK 2)**	**Frayer Model Word**	**Homework**
how to apply the knowledge learnt to date to my mock examinations.			Hannah Kettle Half Paper Paper 11
In LP2.5, I will know:	**30/11/26 - (WK 1)**	**Frayer Model Word**	**Homework**
how to apply the knowledge learnt to date to my mock examinations.			LP2:4 Topics plus consolidation Sparx Maths
In LP2.6, I will know:	**07/12/26 - (WK 2)**	**Frayer Model Word**	**Homework**
how to solve problems using trigonometry with right-angled triangle; how to solve problems using trigonometry with non-rightangled triangles; how to find the area of any triangle. Extended Task.		Tangent	Hannah Kettle Half Paper Paper 13
In LP2.7, I will know:	**14/12/26 - (WK 1)**	**Frayer Model Word**	**Homework**
how to identify and apply circle definitions and properties; how to find angles in circles using circle therorems; how to find angles made by tangents and chords.		Radii	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 circle theorems.
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 mindmap for the topics taught in LP2. Include all key formulae and facts.