The Ellesmere Port C of E College

Part of the Frank Field Education Trust

Year 13 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 trigonometric functions and binomial expansion.

Where have I seen this learning before?
Year 12: Trigonometric functions and equations and graphs.

What could I use it for?
The knowledge and skills I will learn in this learning programme will allow me to solve advanced algebraic problems. These skills are used in coding.

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 derive identities involving the reciprocal trigonometric functions; how to use the inverse trigonometric functions.		Inverse	Inverse Trigonometric Functions
In LP2.2, I will know:	**02/11/26 - (WK 1)**	**Frayer Model Word**	**Homework**
how to interpret the graphs of the trigonometric functions stating their domain and range; how to simplify expressions and solve equations involving the reciprocal trigonometric functions.		Reciprocal	Reciprocal Trigonometric Functions
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 Paper
In LP2.3, I will know:	**16/11/26 - (WK 1)**	**Frayer Model Word**	**Homework**
how to expand expressions using Binomial expansion. Extended Task.		Binomial	Binomial Expansion 1
In LP2.4, I will know:	**23/11/26 - (WK 2)**	**Frayer Model Word**	**Homework**
how to apply the knowledge learned to date in my mock examinations.			
In LP2.5, I will know:	**30/11/26 - (WK 1)**	**Frayer Model Word**	**Homework**
how to apply the knowledge learned to date in my mock examinations.			
In LP2.6, I will know:	**07/12/26 - (WK 2)**	**Frayer Model Word**	**Homework**
how to expand expressions using Binomial expansion where the power is fractional or negative; how to use Binomial expansion and partial fractions. Extended Task.		Factorial	Binomial Expansion 2
In LP2.7, I will know:	**14/12/26 - (WK 1)**	**Frayer Model Word**	**Homework**
how to use and apply the addition formulae for trigonometry; how to use and apply the double formulae for trigonometry.		Identity	Addition Formulae

PRT Task 1

PRT Task 2

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:

Create a revision mind map for the topics taught in LP2. Include all key formulae and facts.