The Ellesmere Port C of E College

Part of the Frank Field Education Trust

Year 12 Mathematics Miss Dwyer
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 functions, straight line graphs and circles.

Where have I seen this learning before?
GCSE: equation of straight lines in y=mx+c form, equation of a circle with centre (0,0), circle theorems.

What could I use it for?
The knowledge and skills I will learn in this learning programme will allow me to solve 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 plot and interpret reciprocal graphs; how to transform functions by translation.		Reciprocal	Functions
In LP2.2, I will know:	**02/11/26 - (WK 1)**	**Frayer Model Word**	**Homework**
how to transform functions by stretching and reflections.		Invariant	Transformations of 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.			
In LP2.3, I will know:	**16/11/26 - (WK 1)**	**Frayer Model Word**	**Homework**
how to find and interpret the equation of a straight line graphs; how to find parallel and perpendicular lines. Extended Task.		Perpendicular	Straight Line Graphs 1
In LP2.4, I will know:	**23/11/26 - (WK 2)**	**Frayer Model Word**	**Homework**
how to solve problems with straight lines involving length and area; how to solve problems involving perpendicular bisectors and midpoints.		Bisector	Straight Line Graphs 2
In LP2.5, I will know:	**30/11/26 - (WK 1)**	**Frayer Model Word**	**Homework**
how to find the equation of a circle.		Radius	Equation of a circle
In LP2.6, I will know:	**07/12/26 - (WK 2)**	**Frayer Model Word**	**Homework**
how to solve problems involving the intersection between lines and circles; how to solve problems with tangents and chords. Extended Task.		Chord	Problem Solving with Circles 1
In LP2.7, I will know:	**14/12/26 - (WK 1)**	**Frayer Model Word**	**Homework**
how to solve problems with circles and triangles.		Tangent	Problem Solving with Circles 1

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.