The Ellesmere Port C of E College

Part of the Frank Field Education Trust

Year 13 Mathematics Mechanics
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 inclined planes, moments and variable acceleration.

Where have I seen this learning before?
LP1: Newton's Laws of Motion and constant acceleration formulae.

What could I use it for?
The knowledge and skills I will learn in this learning programme will allow me to solve problems involving forces and motion. These skills are used in engineering and Physics.

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 solve connected particle problems for vertical and horizontal motion; how to solve connected particle problems for motion in two directions.		Tension	Connected Particles

In LP2.2, I will know:	**02/11/26 - (WK 1)**	**Frayer Model Words**	**Homework**
how to solve variable acceleration problems.		Calculus	Variable Acceleration

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 Words**	**Homework**
how to solve simple moments problems; how to calculate resultant moments. Extended Task.		Resultant	Moments 1

In LP2.4, I will know:	**23/11/26 - (WK 2)**	**Frayer Model Words**	**Homework**
how to apply the knowledge learned to date in my mock examinations.			

PRT Task 1

In LP2.5, I will know:	**30/11/26 - (WK 1)**	**Frayer Model Words**	**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 Words**	**Homework**
how to solve equilibrium problems with moments; how to solve non-uniformed plank problems. Extended Task.		Uniformed	Moments 2

In LP2.7, I will know:	**14/12/26 - (WK 1)**	**Frayer Model Words**	**Homework**
how to solve problems involving static rigid bodies; how to solve problems involving static objects on inclined planes.		Normal Reaction	Inclined Planes

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.