Year 11 Mathematics
Learning Programme 3

The LORIC skill focus for his LP is: RESILIENCE

The Moral Virtues focus for this LP are: RESPECT and JUSTICE

Respect - treat others how you would wish to be treated yourself.

Justice - our College rules are fair and reasonable.

What will I be learning about in this Learning Programme?

In LP3 I will be learning about trigonometry, angles, 3D shapes and vectors.

Where have I seen this learning before?

Year 10: all topics are revision and have been covered in year 10.

What could I use it for?

The knowledge and skills I will learn in this learning programme will allow me to solve problems involving speed, density and pressures. I will also be able to apply algebra knowledge from LP2 to describe features of real-life graphs including velocity-time graphs.

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 LP3.1, I will know:	06/01/25 - (WK 2)	Key Vocabulary	Homework
how to find the area of any triangle without the perpendicular height; how to use the sine rule to find missing lengths; how to use the sine rule to find missing angles.		Perpendicular	LP2:7 Consolidation Sparx Maths

In LP3.2, I will know:	13/01/25 - (WK 1)	Key Vocabulary	Homework
how to use the cosine rule to find missing lengths; how to use the cosine rule to find missing angles; how to solve problems involving the sine and cosine rules.		Hypotenuse	LP3:1 Topics plus consolidation Sparx Maths

In LP3.3, I will know:	20/01/25 - (WK 2)	Key Vocabulary	Homework
how to identify and calculate with co-interior, alternate and corresponding angles; how to use the sum of exterior angles of any polygon; how to use the sum of interior angles and calculate missing interior angles in regular polygons.		Polygon	LP3:2 Topics plus consolidation Sparx Maths

In LP3.4, I will know:	27/01/25 - (WK 1)	Key Vocabulary	Homework
how to represent bearings; how to measure and read bearings; how to make scale drawings using bearings. Extended Task.		Bearings	LP3:3 Topics plus consolidation Sparx Maths

PRT Task 1

In LP3.5, I will know:	03/02/25 - (WK 2)	Key Vocabulary	Homework
how to find the surface area of prisms; how to find the surface area of cones; how to find the surface area of spheres.		Prism	LP3:4 Topics plus consolidation Sparx Maths

In LP3.6, I will know:	10/02/25 - (WK 1)	Key Vocabulary	Homework
how to find the volume of prisms; how to find the volume of cones; how to find the volume of spheres.		Volume	LP3:5 Topics plus consolidation Sparx Maths

LP2 RLW, I will:	24/02/25 - (WK 2)	Key Vocabulary	Homework
review my learning, recalling and applying key knowledge, and focus on closing any gaps in my knowledge.		Retrieval	Sparx Revision Task for Assessment 2

In LP3.7, I will know:	03/03/25 - (WK 1)	Key Vocabulary	Homework
how to add and subtract with column vectors; how to find a scalar multiple of vectors. Extended Task.		Vector	LP3:5 Topics plus consolidation Sparx Maths

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. 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:

Complete a Maths exam paper from Maths Genie independently.