The Ellesmere Port C of E College

Part of the Frank Field Education Trust

Year 9 Sets 1 to 4 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 Pythagoras' Theorem, ratio, proportion, straight line graphs, speed and real-life graphs.

Where have I seen this learning before?
Year 8: ratio notation, value for money, coordinates, linear graphs.

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 calculations. I will also be able to apply algebra knowledge to describe features of real-life 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 identify the hypotenuse of a right-angled triangle; how to calculate missing sides in right-angled triangles; how to solve problems involving Pythagoras' Theorem.	Hypotenuse	LP2:7 Consolidation Sparx Maths
In LP3.2, I will know: 13/01/25 - (WK 1)	**Key Vocabulary**	**Homework**
how to solve problems involving ratios in 1:n form and m:n; how to share amounts in a given ratio; how to solve ratio problems given the whole or a part.	Ratio	LP3:1 Topics plus consolidation Sparx Maths
In LP3.3, I will know: 20/01/25 - (WK 2)	**Key Vocabulary**	**Homework**
how to solve problems with direct proportion and conversion graphs; how to solve worded problems with inverse proportion; how to solve currency conversion problems.	Proportional	LP3:2 Topics plus consolidation Sparx Maths
In LP3.4, I will know: 27/01/25 - (WK 1)	**Key Vocabulary**	**Homework**
how to plot graphs from a table of values; how to compare gradients and intercepts from plotted graphs; how to use the equation of a line in y=mx+c form. Extended Task.	Gradient	LP3:3 Topics plus consolidation Sparx Maths
In LP3.5, I will know: 03/02/25 - (WK 2)	**Key Vocabulary**	**Homework**
how to rearrange equations in y=mx+c form and then find the gradient and intercept; how to find the gradient of a line; how to find the equation of a straight line.	y-intercept	LP3:4 Topics plus consolidation Sparx Maths
In LP3.6, I will know: 10/02/25 - (WK 1)	**Key Vocabulary**	**Homework**
how to solve speed, distance and time problems with and without a calculator; how to solve problems with rates of change and their units.	Speed	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.		Sparx Revision Task for Assessment 2
In LP3.7, I will know: 03/03/25 - (WK 1)	**Key Vocabulary**	**Homework**
how to draw and interpret distance-time graphs; how to calculate the speed from a distance-time graph; how to draw a distance-time graph from given speeds. Extended Task.	Velocity	LP3:6 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. 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:

Earn 2000 XP points in Sparx Maths from XP Boost tasks, XP Target tasks or Independent Learning tasks.