The Ellesmere Port C of E College

Part of the Frank Field Education Trust

# Year 8 Mathematics
# 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 percentage change, equations, sequences, indices and standard form.

**Where have I seen this learning before?**
Year 7: solving simple equations, function machines, forming formulae, continuing sequences, squaring and square roots.

**What could I use it for?**
The knowledge and skills I will learn in this learning programme will allow me to solve algebraic problems including those involving index notation. I will also be able to solve scientific problems involving very large and very small numbers using standard index form.

**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 calculate percentage change;<br>the appropriate methods to solve percentage problems. | | Percentage | LP1:7 Consolidation<br>Sparx Maths |
| **In LP2.2, I will know:** | **02/11/26 - (WK 1)** | **Frayer Model Word** | **Homework** |
| how to solve two step equations;<br>how to solve equations including brackets;<br>how to form basic equations and solve them. | | Variable | LP2:1 Topics plus consolidation<br>Sparx Maths |
| **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. | | | Consolidation<br>Sparx Maths |
| **In LP2.3, I will know:** | **16/11/26 - (WK 1)** | **Frayer Model Word** | **Homework** |
| how to solve equations with fractions involved; including where the denominator is an unknown;<br>how to form and solve equations with unknowns on both sides.<br><br>Extended Task. | | Solution | LP2:2 Topics plus consolidation<br>Sparx Maths |
| **In LP2.4, I will know:** | **23/11/26 - (WK 2)** | **Frayer Model Word** | **Homework** |
| how to generate sequences given a rule in words and given an algebraic rule;<br>how to generate sequences given a rule in words and given a simple algebraic rule;<br>how to find the rule for the nth term of a linear sequence. | | Sequences | LP2:3 Topics plus consolidation<br>Sparx Maths |
| **In LP2.5, I will know:** | **30/11/26 - (WK 1)** | **Frayer Model Word** | **Homework** |
| how to use the addition and subtraction laws for indices;<br>how to simplify algebraic fractions using common factors and indices;<br>how to use the index rules with negative indices. | | Indices | LP2:4 Topics plus consolidation<br>Sparx Maths |
| **In LP2.6, I will know:** | **07/12/26 - (WK 2)** | **Frayer Model Word** | **Homework** |
| how to work with numbers greater than 1 in standard form;<br>how to investigate negative powers of 10.<br><br>Extended Task. | | Standard Form | LP2:5 Topics plus consolidation<br>Sparx Maths |
| **In LP2.7, I will know:** | **14/12/26 - (WK 1)** | **Frayer Model Word** | **Homework** |
| how to work with numbers between 0 and 1 in standard form;<br>how to compare and order numbers in standard form. | | Compare | LP2:6 Topics plus consolidation<br>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. They can simply search the following topics: Percentages, Equations, Indices, Standard Form
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:**

Research the diameters of each of the planets and give your answers in standard form.