



# Mathematics Curriculum Plan Overview

## Year 9

### Entry Level Maths (EL1, EL2 & EL3)

Sample assessments:

<https://passfunctionalskills.co.uk/functional-skills-maths-entry-level-1-2-3/edexcel-functional-skills-maths-entry-level-1-2-3-past-papers/>

Term	Topic	Learning	How can parents' best support	Key Vocab
Autumn 1	Basic number - four operations	<p><b>Basic number</b> - adding and subtracting. Multiplying and dividing.</p> <p><b>Data</b> - Drawing bar charts and line graphs. Reading graphs to pull out key information. Comparing data and checking assumptions. column A is 62 more than column B, are they right? Drawing a table and completing a frequency table.</p>	<p>Practise both mental and written methods of calculations strategies for Addition, Subtraction, Multiplication and division methods.</p> <p>Practise times tables.</p> <p>Reading charts and graphs and giving statements. "I can see that..." There are... more than..."</p> <p>Talk about charts and the information shown - how are they useful.</p>	<p>Add Sum Total Calculate Subtract Takeaway Minus Difference.</p>
	Representing and interpreting data	<p>Comparing data and checking assumptions. column A is 62 more than column B, are they right? Drawing a table and completing a frequency table.</p>	<p>Fractions of a meal, ingredients, items on offer. Calculate fractions of amounts. e.g. one half of 30, a quarter of 200ml, a fifth off £250. Discuss fractions being equal parts of whole amounts.</p>	<p>Compare Read Find Interpret Draw Plot</p>
		<p><b>Fractions</b> - Fractions of amounts. Savings and discounts.</p>	<p><a href="https://www.mathgames.com/">https://www.mathgames.com/</a></p>	<p>Fraction Share Divide</p>
Assessment: <b>Entry Level 10 minute quizzes</b>				
Autumn 2	Sequences	<p><b>Sequences</b> - Finding a pattern and completing a sequence. Whole numbers and decimals sequences.</p>	<p>Practice continuing a pattern. 11, 22, 33, 44... 12, 24, 36... 1.25m, 1.5m, 1.75m, 2m...</p>	<p>Pattern Increase Decrease Sequence</p>
	Rounding and estimation	<p><b>Rounding and estimation</b> - Rounding to the nearest ten of up to 3 digit numbers</p>	<p>Practice rounding to the nearest 10. Play rounding games online <a href="https://mathsframe.co.uk/en/resources/resource/573/Birds-v-Robots-Maths-Battle">https://mathsframe.co.uk/en/resources/resource/573/Birds-v-Robots-Maths-Battle</a></p>	<p>Round Nearest Estimate Calculate</p>
	Positional language	<p><b>Positional language</b> - Directions (Left, right, forward, back, turn, stop)</p>	<p>Positional language can be used when going out on every day activities. Play games using positional language.</p>	<p>Up Down Left Right Straight ahead</p>
	Coordinates	<p><b>Coordinates</b> - Reading coordinates on a basic graph. Plotting basic coordinates on a graph.</p>	<p>Practice coordinates using online games <a href="https://mathsframe.co.uk/en/resources/resource/469/Coordinates-Alien-Attack">https://mathsframe.co.uk/en/resources/resource/469/Coordinates-Alien-Attack</a></p>	<p>Coordinates Plot Draw X axis Y axis</p>
Assessment: <b>Entry Level Mock Assessment</b>				
Spring 1	Basic number - four operations	<p><b>Basic number</b> - adding and subtracting. Multiplying and dividing.</p>	<p>Practise written methods for basic arithmetic. Column addition and subtraction. Multiplication and division methods. Practice times tables.</p>	<p>Multiply Calculate Workout Times</p>
	Shapes and shape properties	<p><b>Shapes and shape properties</b> - Common shapes, right angles, lines of symmetry.</p>	<p>Identifying and recognising right angles.</p>	<p>Right angle symmetry Symmetrical</p>
	Basic decimal	<p><b>Basic decimals</b> - Adding and subtracting decimal numbers.</p>	<p>Adding and subtracting numbers with 1 decimal place. E.g 12.5 + 3.4</p>	<p>Decimal place Tenth</p>
	Measures Time	<p><b>Measures</b> - Reading a scale and rounding to the nearest interval e.g. cm or ml.</p> <p><b>Time</b> - key time facts (date,</p>	<p>Reading measures on scales, weighing in the kitchen. Practice rounding to the nearest interval e.g nearest 100ml 100g 1 litre 1kg.</p>	<p>Rounding Nearest division Interval</p>

		seconds, minutes, hours, days, weeks in a year)	Time - reminders of time facts. There are 52 weeks in 1 year. There are 60 minutes in 1 hour. Read the time and write it in digital 12 and 24 hour.  Practice reading the time using clocks and online games <a href="https://mathsframe.co.uk/en/resources/resource/116/telling-the-time">https://mathsframe.co.uk/en/resources/resource/116/telling-the-time</a>  <a href="https://www.mathgames.com/">https://www.mathgames.com/</a>	Weight Capacity Units Scale  Annual Annually Yearly Monthly Daily
<b>Assessment: <u>Entry Level assessment 1st attempt</u></b>				
<b>Spring 2</b>	<b>Basic number - four operations</b>  <b>Representing and interpreting data</b>  <b>Sequences</b>	<b>Basic number</b> - adding and subtracting. Multiplying and dividing.  <b>Data</b> - Revisiting drawing accurate bar charts and line graphs. Proving states about data to be true or incorrect.  <b>Sequences</b> - Worded questions involving application of understanding of sequences	Practise written methods for basic arithmetic. Column addition and subtraction. Multiplication and division methods. Practice times tables.  Read bar charts and talk about what is shown. Make comparisons. Reading line graphs and drawing conclusions.  Writing and continuing sequences. Advanced would include decimal places. <a href="https://www.mathgames.com/">https://www.mathgames.com/</a>	Multiply Calculate Workout Times  Interpret Read Graph Chart Table  Sequence Pattern Next term
<b>Assessment: <u>Entry Level assessment resit attempts</u></b>				
<b>Summer 1</b>	<b>Functional skills - money</b>  <b>Angles</b>  <b>Basic algebra</b>	<b>Money</b> - Calculating involving money. Addition and subtraction. Finding total cost and change.  <b>Angles</b> - Basic angle rules about a point and on a straight line.  <b>Algebra</b> - Basic algebra, 1 step equations, substitution. Function machines 1 and 2 step,	Discuss the use of money at home, going to the shops to give real life context. Adding up totals of 2 amounts. £12.50 plus £5.49. Subtracting amounts from whole numbers and decimals amounts, e.g. £10 minus £4.59.  Reinforcing basic angle rules. Angles on a straight line add up to 180 degrees, around about a point add up to 360 degrees.  1 step algebra equations. $a + 3 = 5$ and $10 - c = 4$ and $7f = 35$ therefore $f = 5$  Fact families $10 + 4 = 14$ therefore $14 - 4 = 10$ and $14 - 10 = 4$ <a href="https://www.mathgames.com/">https://www.mathgames.com/</a>	Total Sum Calculate Change Difference Total amount  Straight line Right angle Acute angle Obtuse angle Reflex angle Full turn  Algebra Inverse operation (opposite) Function
<b>Assessment: <u>Entry Level assessment resit attempts</u></b>				
<b>Summer 2</b>	<b>Sequences - negative numbers</b>  <b>Negative numbers - four operations</b>  <b>Functional skills - time</b>  <b>Functional skills - measures</b>	<b>Sequences</b> - increasing from negative integers (numbers) into positive integers. Crossing the 0 boundary in difference multiples forwards and backwards.  <b>Negative numbers</b> addition and subtraction of up to 2 digit numbers, multiplication and division rules involving negative number rules.  <b>Measuring</b> items using a scale. Measuring accurately using a ruler and weighing using scales.	Practice continuing sequences forwards and backwards across 0. Discuss patterns within sequences and finding missing numbers.  Adding and subtracting negative numbers $2 - 3 = -1$ $-3 - 5 = -8$ $3 - -7 = 4$  Multiplying negative numbers $-3 \times 5 = -15$ $-5 \times -5 = 25$ $8 \times -2 = -16$  Measuring items using a ruler or tape measure. Practice weighing items in the kitchen. Reading measures on common household items. <a href="https://www.mathgames.com/">https://www.mathgames.com/</a>	Positive Negative Integer Zero  mm, cm m Km ml litre  g kg

