



# Mathematics Curriculum Plan Overview

## Year 10 Entry Level 3 leading into GCSE curriculum plan overview

Term	Topic	Learning	How can parents' best support	Key Vocab
Autumn 1	Basic number Factors and multiples	<b>Number</b> - Negative numbers, index rules, negative indices, standard form, BIDMAS, Describing factors and multiples, Highest Common Factor Lowest common Multiple, using Venn diagrams to find HCF LCM ,	Continued practice with times tables supports work on multiplication and division.	Negative, positive, indices, squared, cubed factor, multiple, HCF, LCM, venn diagram, chart, table, bar chart, pictogram, multiplication, division, addition, standard form, Brackets, Subtraction
	Basic fractions Sequences	<b>Statistics</b> - Bar charts and pictograms including dual bar charts.	Look at data in the media and how it is used/misused.	
Assessment: <b>Entry Level assessment</b>				
Autumn 2	Basic algebra Rounding and estimation Area and perimeter sequences	<b>Algebra</b> - Generating sequences given a rule. continuing a numeric or pictorial sequence given a rule. Collecting terms and simplifying expressions <b>Rounding</b> numbers to the nearest whole number. <b>Geometry and Measures</b> - area and perimeter of rectangles and squares and compound shapes <b>Geometry and Measures</b> - area and perimeter of rectangles and squares and compound shapes,	Giving directions using instructions of left and right turn, clockwise and anticlockwise. Quarter and Half turns.  Exposure to reading measurements of different common things such as groceries, items in catalogues, estimating distances, etc.  Discussion around imperial and metric units, where they may be used and may differ.  Converting between common units of measure	Decimal, rounding, fraction, estimate, approximate, significant figure, decimal place, axis, triangle, angles, construction, coordinates, be
Assessment: <b>GCSE Mock assessment/ Entry Level Resit</b>				
Spring 1	Basic number Basic decimals Basic percentages Angles Units of measures	<b>Basic number</b> - 4 operations Price of products including <b>decimals</b> . Sequence patterns involving <b>decimals</b> <b>Algebra</b> - Generating sequences given a rule. continuing a numeric or pictorial sequence given a rule. Collecting terms and simplifying expressions <b>Basic percentages</b> - finding 10% 25% 50% and 75% of an amount. <b>Geometry and measures</b> - scale drawings, constructing triangles, scale drawings, bearings Angles - angle rules in triangles,	Practise written methods for basic arithmetic. Column addition and subtraction. Multiplication and division methods. Practice times tables.  Talk about prices and percentage of when going out shopping ( $\frac{1}{4}$ of is what percentage off? etc)  Look at maps and a talk about how small it is on the map compared to real life.	negative, positive, indices, squared,, multiplication, division, addition, standard form, Brackets, Subtraction, expression, equation, term, inequality, simplify, solve, area, perimeter, compound shape, metre, centimetre, millimetre, kilometre,
Assessment:				
Spring 2	Circles Ratio and proportion	<b>Circles</b> - List parts of a circle, find circumference and area, <b>Ratio</b> - simplifying ratios,, share in a given ratio, use the unitary	Investigations involving recipes and serving suggestions. (Serves 2 people, how much would we need for 3 people 4 people 5	circumference, pi, diameter, radius, area, chord, segment, sector, arc, tangent, ratio, proportion, share, difference, simplify, probability, and, or, chance,

	<b>Basic probability</b>	method  <b>Probability</b> - calculate the probability of single events happening using fractions/decimals/percentages, calculate the probability of something "Not" happening,	people?...)  Discussing the chance of certain events happening. Weather forecasts for example. There is a 35% chance of rain today so therefore there must be 65% it won't rain.	impossible, unlikely, even, likely, certain, percentage, decimal, fraction, relative frequency
<b>Assessment:</b>				
<b>Summer 1</b>	<b>Equations</b>  <b>Transformations</b>  <b>Revision</b>	<b>Algebra</b> - solve 1 and 2 step linear equations  <b>Geometry and Measures</b> - enlarge, rotate and translate shapes using coordinate grids, describe transformations, plot enlargements  <b>Angle</b> rules in right angles and straight lines, as well as triangles and quadrilaterals.	Practice missing number questions. e.g. B (blank) multiplied by 6 is 30, what is B?  Investigating angles, searching for right angles, acute, obtuse and reflex angles in everyday locations.	Shapes, describe, scale factor, transformation, rotation, reflection, enlargement, translation, coordinates, vectors, solve, linear, graph, straight line graph, angle, exterior, interior, triangle, quadrilateral, obtuse, reflex, acute, right angle,
<b>Assessment: <u>GCSE Exams/ Entry Level 3 Resits</u></b>				
<b>Summer 2</b>	<b>Nets and Surface Area</b>  <b>Basic decimals</b>  <b>Money</b>  <b>Time</b>	<b>Number</b> - percentages, basic percentages as proportion of 100, converting percentages to decimals  <b>Money</b> - 4 operations (adding, subtracting, multiplying and dividing)  <b>Time</b> - Reading and telling the time in 12 and 24 hour time format.	Working out common percentages of amounts. 25% 50%. reinforcing how 50% is equivalent to a half and 25% is the same as a quarter.  Calculating with money. Total cost of a shopping basket.  Working with time. Reading timetables, discussing where there is enough time to complete events.	percentage, percentage change, percentage increase, percentage decrease, proportion, adding, subtracting, multiplying and dividing, convert,