



Mathematics Curriculum Plan Overview

Year 11

GCSE plan overview

Term	Topic	Learning	How can parents' best support	Key Vocabulary
Autumn 1	Basic number	<p>Number - Negative numbers, index rules, negative indices, standard form, BIDMAS, Describing factors and multiples, Highest Common</p> <p>Factors and Multiples - Factor Lowest common Multiple, using Venn diagrams to find HCF LCM</p> <p>Statistics - Bar charts and pictograms including dual bar charts.</p> <p>Fractions - simplifying fractions, equivalent fractions, four operations with fractions. Calculating fractions of amounts.</p>	<p>Continued practice with times tables supports work on fractions and ratio.</p> <p>Look at data in the media and how it is used/misused.</p>	<p>Negative, positive, indices, squared, cubed, factor, multiple, HCF, LCM, venn diagram, chart, table, bar chart, pictogram, multiplication, division, addition, standard form, brackets, subtraction</p>
	Factors and multiples			
	Collecting and representing data			
	Basic fractions - four operations			
Assessment: <u>Key skills tracking</u>				
Autumn 2	Sequences	<p>Sequences - Term to term, term rules, nth term</p> <p>Rounding - To nearest 10, 100, 1000. Round to 1 and 2 decimal places, whole numbers, given significant places.</p>	<p>Encouragement to count in sequences, to identify the counting to a counting sequence.</p> <p>Counting different denominations of money.</p> <p>Rounding amounts of money, prices, etc. to the nearest pound, ten pound, hundred pound, thousand etc.</p> <p>Practice reading coordinates on a grid.</p>	<p>Sequence, pattern, rule, nth, algebraic, brackets, subtraction, expression, equation, term, inequality, simplify, solve, coordinates, axis, bearings, measure, construct, interior, exterior, parallel, perpendicular, opposite angles, alternate angles, co-interior angles</p>
	Rounding	<p>Algebra - Generating sequences given a rule. continuing a numeric or pictorial sequence given a rule. Linear sequences - term to term and position to term rules. Fibonacci type sequences. Simplifying expressions. Solving algebraic equations</p>		
	Basic Algebra	<p>Angles - measuring and drawing. calculating angles based on angle facts. Angles in common shapes, angles on parallel lines.</p>		
	Angles	<p>Coordinates - 4 quadrant grid reading.</p>		
	Coordinates			
Assessment: <u>Key skills tracking (Mock Exams November)</u>				
Spring 1	Decimals	<p>Decimals - Comparing decimals and recognising place value. four operations with decimals.</p> <p>Percentages - Percentage facts, percentage of amounts, basic percentages as proportion of 100, Percentage change. Converting percentages to decimals.</p> <p>Geometry and Measures - Area and perimeter of rectangles and squares and compound shapes made with rectilinear shapes, area of quadrilaterals including trapeziums and parallelograms, area of triangles and polygons made from triangles</p>	<p>Exposure to working with decimals. e.g. shopping item prices.</p> <p>Discussing % out of 100. Increasing and decreasing by a %</p> <p>Calculating the area/perimeter of places found around the home</p> <p>Use different measures in real life settings</p>	<p>Place value, hundredth, thousandth, percentage, percentage change, percentage increase, percentage decrease, proportion, adding, subtracting, multiplying and dividing, convert, area, perimeter, compound shape, metre, centimetre, millimetre, kilometre</p>
	Percentages			
	Area and Perimeter			
	Hot Spot - Measures			
Assessment: <u>Key skills tracking</u>				

<p>Spring 2</p>	<p>Circumference and area of a circle</p> <p>Ratio and Proportion</p> <p>Basic Probability</p> <p>Hot Spot - Time</p>	<p>Geometry and measures - naming parts of circles, finding circumference and area of circles, area of sectors and segments</p> <p>Ratio and proportion - simplifying ratios finding similar ratios, share in a given ratio, use unitary method for calculating ratios</p> <p>Probability - calculate the probability of single events happening using fractions/decimals/percentages, calculate the probability of something "Not" happening, use AND and OR rule with probability in tree diagrams, understand mutually exclusive and independent event</p>	<p>Name and identify parts of a circle. Listen to the circle song and google and discuss pi</p> <p>Practice reading recipes and serving suggestions. (Serves 2 people, calculate how much we need for 3 people 4 people 5 people?...)</p> <p>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.</p> <p>Look at timetables and practice reading digital and analogues times</p>	<p>Circumference, diameter, radius, arc, sector, segment, ratio, proportion, share, difference, simplify, probability, and, or, chance, impossible, unlikely, even, likely, certain, percentage, decimal, fraction, relative frequency</p>
<p>Assessment: <u>Key skills tracking</u></p>				
<p>Summer 1</p>	<p>Equations</p> <p>Non-calculator Exam Prep</p> <p>Hot spot - Calculator work</p>	<p>Algebra - solve 1 and 2 step linear equations, solve equations with unknowns on both sides, solve equations involving brackets, solve quadratic equations by factorising, using the formula or completing the square.</p>	<p>Look at past papers and identify areas for revision</p> <p>Visit BBC Bitesize and review content for AQA GCSE Maths https://www.bbc.co.uk/bitesize/examspecs/z8sg6fr</p>	<p>Equation, inverse, solve, find the solution to,</p>
<p>Assessment: <u>Key skills tracking (Paper 1 examination May)</u></p>				
<p>Summer 2</p>	<p>Calculator Exam Prep</p> <p>Hot Spot Using a calculator</p>	<p>Exam revision - Practice questions from calculator papers</p>	<p>Use of a scientific calculator.</p> <p>Answering wordy multi-step maths questions.</p>	<p>All of previously used key vocab</p>
<p>(Paper 2 & 3 examinations May/June)</p>				