

	Term	Topic	Learning Outcomes	Assessment
GCSE Foundation	Y10 Autumn 1	Unit 1: Arithmetic	• Operations ○ Add, subtract, multiply and divide with whole numbers using mental and written methods. ○ Use order of operations to add & subtract, multiply and divide with negative numbers. • Number Properties ○ Recognise two-digit prime numbers. ○ Find the LCM and HCF of two numbers by listing ○ Write a number as the product of its prime factors ○ Use prime factor decomposition and Venn diagrams to find the LCM and HCF of two numbers.	Topic review at the end of each unit. Units 1-9 assessed in the Autumn Term. Content from Y7-9 could also be assessed.
		Unit 2: Shape	• 2D Shapes ○ Use correct terms and notations for shape properties. ○ Identify congruent shapes. ○ Recall 2D shape names and their properties. ○ Identify line and rotational symmetry of 2D shapes. • 3D Shapes ○ Recall 2D shape names and their properties. ○ Identify and sketch nets of 3D shapes. ○ Identify planes of symmetry of 3D shapes. ○ Understand and draw plans and elevations. ○ Sketch 3D shape based on their plans and elevations. • Circles ○ Identify circle definitions and properties. ○ Use a compass to draw circles and arcs accurately.	
		Unit 3: Decimal Arithmetic	• Operations ○ Order decimals ○ Add, subtract, multiply & divide decimals	
		Unit 4: Angle	• Draw & Measure ○ Measure and draw acute, obtuse and reflex angles accurately. ○ Draw and measure a bearing. • Angle Rules ○ Calculating missing angles in a right angle, straight line, around a point, intersecting lines, triangles, quadrilaterals and parallel lines. ○ Calculate the interior and exterior angles of polygons.	

	Term	Topic	Learning Outcomes	Assessment
	Y10 Autumn 1	Unit 5: Fractions	• Equivalent Fractions ○ Calculate equivalent fractions. ○ Simplify a fraction to its simplest form. ○ Change between mixed numbers and improper fractions. ○ Compare two fractions. ○ Order 3 or more fractions. • Arithmetic ○ Add, subtract, multiply and divide proper fractions and mixed numbers. ○ Calculate a fraction of an amount. ○ Use cross cancelling to simplify calculations. ○ Find the reciprocal of a number.	

	Term	Topic	Learning Outcomes	Assessment
Y10 Autumn 2		Unit 6: Expressions 1	• Algebraic Manipulation ○ Substitute into expressions and formulae. ○ Simplify expressions by collecting like terms. ○ Understand the difference between expressions, equations, formulae, inequalities and identities. ○ Form algebraic expressions and formulae.	
		Unit 7: Percentages 1	• Percentage Changes ○ Calculate a percentage of an amount. ○ Increase and decrease by a percentage. ○ Calculate a percentage of an amount using a multiplier. ○ Increase and decrease by a percentage using a multiplier. ○ Express as a percentage. ○ Find a percentage change.	
		Unit 8: Linear Graphs 1	• Draw & Interpret Linear Graphs ○ Finding rules for basic straight-line graphs ○ Drawing linear graphs from an xy table ○ Identify the gradient and y-intercept from the form $y = mx + c$	
		Unit 9: Ratio & Proportion 1	• Ratio ○ Solving problems using equivalent ratios. ○ Simplify a ratio (including into the form 1:n or n:1). ○ Identify and work with fractions in ratio problems. ○ Use equivalence to combine ratios. ○ Share a quantity in a ratio. • Proportion ○ Solve problems involving direct proportion including graphical and algebraic representations. ○ Compare different products using unit rates to determine the best buy. ○ Solve problems involving inverse proportion including graphical and algebraic representations.	
	Autumn Term Assessment			

	Term	Topic	Learning Outcomes	Assessment
	Y10 Spring 1	Unit 10: Equations 1 Unit 11: FDP Unit 12: Expressions 2 Unit 13: Estimation	• Form and Solve Equations ○ Solve two step equations by balancing. ○ Solve equations with positive and negative unknowns on both sides. ○ Form and solve equations using angles rules. • Equivalent Fractions, Decimals and Percentages ○ Convert between fractions, decimals and percentages ○ Recall key equivalent FDP for $\frac{1111}{2485}$ ○ Compare and order fractions, decimals and percentages • Algebraic Manipulation ○ Use the indices rules to multiply and divide terms. ○ Expand single brackets and simplify. ○ Factorise into single brackets. ○ Expand double brackets. • Rounding ○ Round to the nearest 10, 100, 1000, integer, decimal place, significant figure. • Estimation ○ Estimate calculations by rounding to 1 s.f. • Calculator Use ○ Demonstrate calculator proficiency.	Topic review at the end of each unit. Units 1-14 assessed in the Spring Term. Content from Y7-9 could also be assessed.
	Y10 Spring 2	Unit 14: Measures Unit 15: Area 1	• Conversions ○ Convert between standard metric units of length, mass, capacity, time and money. ○ Using map scales to convert lengths. • Area & Perimeter Formulae ○ Calculate the area and perimeter of rectangles, triangles, parallelograms & trapeziums ○ Calculate the area and perimeter of compound shapes made of rectangles, triangles, parallelograms & trapeziums ○ Form and solve equations involving the area and perimeter of shapes ○ Calculate the circumference of a circle and the perimeter of $1/2$ $1/4$ $3/4$ circles ○ Calculate the area of a circle and of $1/2$ $1/4$ $3/4$ circles	

	Term	Topic	Learning Outcomes	Assessment
Y10 Spring 2		Unit 16: Sequences	• Generate & Continue Sequences ○ Generate terms of a sequence from a term-to-term, position-to-term and n^{th} term rule. ○ Recognise and continue sequences that are arithmetic (linear), geometric, triangular, square (quadratic), cube and Fibonacci. • Rules for Linear Sequences ○ Find the n^{th} term rule of a linear sequence ○ Use inverses to check whether a value is a term in a sequence. ○ Create rules for sequences written in an xy table. ○ Complete an xy table using a linear rule. ○ Generate a sequence and rule from a diagram.	
		Unit 17: Statistics 1	• Types of Data ○ Know and understand the terms: primary data, secondary data, qualitative data, quantitative data, discrete data, continuous data, samples, population, bias. ○ Discuss random sampling and questionnaires. ○ Critique the pros and cons of sampling and questionnaires. • Presenting Data ○ Tally data into a frequency table. ○ Interpret frequency tables. ○ Draw and interpret a pictogram, bar line graph, bar chart, frequency polygon, time-series graph and pie charts. ○ Plot data on a scatter graph, state the correlation and trend. ○ Draw a line of best fit to make estimates from a scatter graph and identify outliers. • Averages & Range ○ Calculate the mode, median, mean and range from frequency tables.	
Spring Term Assessment				

	Term	Topic	Learning Outcomes	Assessment
Y10 Summer 1		Unit 18: 3D 1	• Plans & Elevations ○ Draw plans & elevations of solids. ○ Draw a solid from given plans & elevations. • Surface Area ○ Calculate the surface area of cubes and cuboids. ○ Calculate missing lengths when given a surface area. • Volume ○ Calculate the volume of cubes, cuboids and prisms. ○ Calculate missing lengths when given the volume of a prism.	Topic review at the end of each unit. Units 1-20 assessed in the Y10 Mocks. Content from Y7-9 could also be assessed.
		Unit 19: Probability 1	• Calculating Probability ○ Mark a probability on a number line ○ Calculate expected outcomes ○ List outcomes of combined events including using a two-way table and a frequency tree. ○ Calculate the probability from a list, a two-way table and a frequency tree. ○ Calculate a probability from a sample space diagram. ○ Calculate the relative frequency of an event.	
		Unit 20 Transformations	• Drawing & Describing Transformations ○ Reflect, rotate, translate and enlarge shapes on a co-ordinate grid. ○ Describe a reflection, rotation, translation and enlargement. ○ Draw a shape after a combined transformation then describe it as a single transformation.	
		Unit 21: Compound Measures	• Calculating with Compound Measures ○ Calculate a speed, distance and time including fractions of an hour. ○ Calculate a density, mass and volume. ○ Calculate a pressure, mass and area. ○ Use appropriate units for measures.	

	Term	Topic	Learning Outcomes	Assessment
	Y10 Summer 2	Unit 22: Real Life Graphs	• Draw & Interpret Real Life Graphs ○ Understand and use conversion graphs. ○ Compare flow graphs with their containers. ○ Find approximate solutions by reading from real-life graphs. ○ Interpret information from real-life graphs to compare and evaluate different financial options. ○ Calculate and compare wages from hourly rates and hours worked from real-life graphs. ○ Interpret the gradient and y-intercept of any real-life graph. • Distance-Time Graphs ○ Interpret distance-time graphs by calculating speeds, distances and time. ○ Understand that the gradient represents the speed. ○ Draw distance-time graphs. • Speed-Time Graphs ○ Interpret speed-time graphs. ○ Understand that the gradient represents the acceleration.	
		Unit 23: Pythagoras' Theorem	• Applying the Theorem ○ Calculate the hypotenuse and shorter sides in right angled triangles using Pythagoras' Theorem. ○ Solve problems involving distances, heights, and measurements by applying in real-life and problem-solving contexts. ○ Calculate the length of a line segment, the midpoint of a line segment and an endpoint of a line segment when the midpoint and the other endpoint are known.	
		Unit 24: Statistics 2	• Averages & Range ○ Compare two or more sets of data using averages and range. ○ Calculate a missing value in a dataset when the mean, median, mode, or range is given. ○ Calculate averages and range from frequency tables. ○ Draw appropriate diagrams to display data from frequency tables.	
		Unit 25: Standard Form	• Arithmetic with Standard Form ○ Convert between standard form and ordinary numbers. ○ Order, add, subtract, multiply & divide numbers in standard form with/out a calculator.	
	Y10 Mock Exam			

	Term	Topic	Learning Outcomes	Assessment
GCSE Higher	Y11 Autumn 1	Unit 26: Area 2	• Applying Area & Perimeter Formulae ○ Calculate missing lengths in rectangles, triangles, parallelograms, trapeziums & circles when the area or perimeter is given. ○ Calculate the length of an arc and the perimeter of a sector. ○ Calculate the area of a sector.	Topic review at the end of each unit.
		Unit 27: Percentages 2	• Applying Multipliers ○ Calculate simple and compound interest. ○ Interpret and solve growth and decay problems. ○ Calculate a reverse percentage.	All units assessed in the Y11 Autumn Mocks.
		Unit 28: Expressions 3	• Algebraic Manipulation ○ Expand and simplify multiple single brackets. ○ Factorise into single brackets. ○ Expand double brackets. ○ Factorise into double brackets including the difference of two squares.	
		Unit 29: Linear Graphs 2	• Equations of Lines ○ State the equation of a line given the gradient and one co-ordinate it passes through. ○ Identify parallel lines using the form $y = mx + c$. ○ State the equation of a line parallel to a given one through a specified coordinate. ○ State the equation of a line through two coordinates. • Simultaneous Equations ○ Solve linear simultaneous equations graphically.	

	Term	Topic	Learning Outcomes	Assessment
Y11 Autumn 2		Unit 30: 3D 2	• Surface Area & Volume Formulae ○ Calculate the surface area and volume of prisms & cylinders. ○ Apply the surface area and volume formulae for pyramids, cones and spheres.	
		Unit 31: Equations 2 & Inequalities	• Solving Linear Equations ○ Solve linear equations with negative unknowns and brackets on both sides. • Solving Inequalities ○ Represent inequalities on a number line. ○ Write inequalities that have been represented on a number line. ○ Solve linear inequalities and represent their solution on a number line. • Solving Simultaneous Equations ○ Solve simultaneous equations algebraically with positive terms. ○ Solve simultaneous equations algebraically with negative terms. ○ Form and solve simultaneous equations algebraically. • Solving Quadratic Equations ○ Solve quadratics equations by factorising into double brackets.	
		Unit 32: Ratio & Proportion 2	• Proportion and Equations ○ Complete a table of values in direct or inverse proportion. ○ Interpret graphs of direct or inverse proportion. ○ Understand and use a multiplier to express parts of a ratio algebraically to form linear equations to solve contextual problems.	
		Unit 33: Probability 2	• Independent and Dependent Events ○ Explain the difference between AND (both events happen) and OR (at least one event happens). ○ Apply the AND and OR rules to real-life problems (e.g. dice, cards, spinners). ○ Complete and use tree diagrams to calculate the probability for independent and dependent events using the AND and OR rules. • Venn Diagrams and Set Notation ○ Complete and interpret venn diagrams to calculate a probability. ○ Understand the notation $P(A)$, $P(A')$, $P(A \cap B)$, $P(A \cup B)$ and calculate these from a venn diagram.	
Y11 Autumn Mock Exam				

	Term	Topic	Learning Outcomes	Assessment
Y11 Spring 1		Unit 34: Other Graphs	• Quadratic Graphs ○ Draw quadratic graphs from an xy table. ○ Identify the roots, y-intercept and turning point of a quadratic graph . ○ Sketch quadratic graphs and show their roots and y-intercept. ○ Solve quadratic equations graphically. • Other Graphs ○ Draw cubic and reciprocal graphs from an xy table. ○ Sketch the features of cubic and reciprocal graphs.	Topic review at the end of each unit. All units assessed in the Y11 Spring Mocks.
		Unit 35: Trigonometry	• SOH CAH TOA ○ Apply the Pythagoras' theorem and trigonometric ratios to calculate a missing side length or angle. ○ Understand and recall the exact values for sin, cos and tan for 0, 30, 45, 60 and 90 degrees.	
		Unit 36: Constructions & Loci	• Scale Drawings ○ Interpret scales written as a ratio (e.g. 1 :50) or as a statement (e.g. 1 cm represents 5 m). ○ Calculate scale drawing/map distances, lengths, or heights using a given scale. ○ Write a scale in the simplified ratio form 1:n ○ Create scale drawings of a floor plan/model using scales written as a ratio (e.g. 1 :50) or as a statement (e.g. 1 cm represents 5 m). • Bearings ○ Draw and measure bearings and journeys accurately. ○ Fix a position using bearings. • Constructions & Loci ○ Construct a perpendicular bisector of a line segment. ○ Construct a perpendicular of a line segment from a point, a perpendicular of a line segment from a point on the line, an angle bisector . ○ Construct a 60° angle (SSS triangle) and 90° angle (perpendicular). ○ Use angle bisectors to construct 30° and 45° angles ○ Draw loci for points at a fixed distance from another point, line or angle. ○ Use angle bisectors and perpendicular bisectors in loci problems.	
		Unit 37: Vectors	• Vector Arithmetic ○ Represent a vector using an arrow or in column form. ○ Add and subtract vectors in column form. ○ Multiply a vector by a scalar.	
Y11 Spring Mock Exam				

	Term	Topic	Learning Outcomes	Assessment
	Y11 Spring 2 & Summer 1	Revision	Revision tasks preparing for the GCSE Exams.	Weekly past papers and revision tasks.
	GCSE Exam Dates Edexcel GCSE Maths Paper 1 (Non-Calculator) - 14th May 2026 Edexcel GCSE Maths Paper 2 (Calculator) - 3rd June 2026 Edexcel GCSE Maths Paper 3 (Calculator) - 10th June 2026			