



		Year 7 <i>7 X lessons per fortnight</i>		
	Wk	Topic	Learning content	Assessment
Autumn	1	Algebra 1	Sequences Functions Explain the rules of algebra	
	2		Equations Simplify expressions	
	3		Expand brackets <i>Key vocabulary</i> functions, expressions, expand, equations	
	4	Number 1	Four operations including decimals Powers of 10 Estimation	
	5		Negative numbers Solve problems	
	6		Rounding <i>Key vocabulary</i> negative, estimate	
	7	Geometry and Measures 1	2-D and 3-D shapes Perimeter and area Surface area and volume	
	8		Constructions <i>Key vocabulary</i> geometrical, isometric, surface area	
	9			
	10	Statistics 1	Averages Read and interpret statistical diagrams Probability	
	11		Sample space diagrams <i>Key vocabulary</i>	
	12		mode, range, median, probability, outcomes Topics 1-4 Assessment	
	13	Algebra 2	Square and triangle numbers Graphs from functions Substitute into algebraic expressions Simplify expressions	
	14		<i>Key vocabulary</i> triangular numbers, linear rules	
	15			
Spring	1	Number 2	Fraction, decimal and percentage Add, subtract, multiply and divide fractions including mixed numbers	
	2		Percentage and fraction of amounts Ratio and direct proportion	
	3		<i>Key vocabulary</i> proportion, integer	
	4	Geometry and Measures 2	Co-ordinates in 4 quadrants Calculate missing angles; calculate exterior angles in shapes; construct triangles.	
	5		Construct the mid-point and Perpendicular bisector of a straight line and the bisector of an angle. <i>Key vocabulary</i> quadrant, exterior, interior	
	6			
	7	Statistics 2	Collect data and record it using frequency tables. Interpret graphs and diagrams, and draw conclusions.	
	8		<i>Key vocabulary</i> discrete, class intervals, distributions, class boundaries Topics 5-8 Assessment	
	9	Algebra 3	Construct simple formulae Express simple problems algebraically. Graphs of simple linear functions.	
	10		Solve problems <i>Key vocabulary</i> rules	
Summer	1	Number and measures 3	BODMAS/BIDMAS Round numbers to nearest 10,100, 1000 and 1 and 2 decimal places	
	2		Solve problems involving measures x and / by 2-digit numbers; Make estimates of calculations.	
	3		<i>Key vocabulary</i> abbreviations	
	4	Algebra 4	Solve equations Construct and use simple formulae Conversion graphs	
	5		<i>Key vocabulary</i> co-ordinates, formulae	
	6			
	7	Number 4	Solve problems Calculate fractions and % of a quantity +, -, x, / decimals	
	8		Use a calculator effectively Convert between fractions, decimals and %	
	9		<i>Key vocabulary</i> proportions, quantity	
	10	Statistics 3	Collect and record data Probability Averages	
	11		Interpret graphs <i>Key vocabulary</i>	GL assessment fortnight
	12		Conclusions, pie charts	
	13		Geometry and Measures 3	2D and 3D shape properties; angles Symmetry and transformations; enlargements <i>Key vocabulary</i> Construct, reflect, rotational symmetry, centre of rotation
	14			

		Year 8 <i>7 X lessons per fortnight</i>		
	Topic	Learning content	Assessment	
Autumn	Number and Algebra 1	Multiples, factors, prime factors, LCM, HCF Indices Sequences and nth term Multiply and divide decimals by 10,100 and 1000 Negative numbers <i>Key vocabulary</i> prime factors, decomposition, lowest common multiple, highest common factor, linear.		
		Algebra 2	Simplify expressions Solve equations Expand brackets Substitute into an expression Use and construct formulae <i>Key vocabulary</i> like terms, index notation	
			Geometry and Measures 1	Angles 2D shapes: construct perpendicular lines, bisect angles and triangles <i>Key vocabulary</i> classify, bisect
	Statistics 1			Probability Mutually exclusive events Take account of bias <i>Key vocabulary</i> mutually exclusive, outcome, experimental
		Number 2		Fractions, decimal and %; + - x / fractions Calculate a fraction and % of a quantity Equivalent fractions and mixed numbers Converting improper and mixed number fractions <i>Key vocabulary</i> convert, integer
	Algebra 3		Find a function given its inputs and outputs Generate and plot co-ordinates from a linear function Interpret the features of linear graphs Sketch graphs of real-life situations <i>Key vocabulary</i> linear function, plot, features	
		Geometry and Measures 2	Read scales Convert measurements Area and perimeter Volume and surface area Area and circumference of a circle <i>Key vocabulary</i> volume, surface area, imperial	
	Statistics 2		Collect and present information Interpret graphs and diagrams, including scatter graphs <i>Key vocabulary</i> discrete, continuous, scatter graphs	Spring term assessment on topics 4-7
		Number 3	+, -, x, / integers and decimals Round to nearest 10, 100, 1000 and 2 decimal places Significant figures Use a calculator effectively; estimate BODMAS/BIDMAS <i>Key vocabulary</i> cube root, sign change, powers	
	Geometry and Measures 3		Congruent shapes Solve problems using ratio Symmetry and transformations Enlargements <i>Key vocabulary</i> congruent, transformations, enlarge, scale factor	Assessment week
		Statistics 3	Collect and record data Averages Probability <i>Key vocabulary</i> outcomes, repeat, class intervals	
	Geometry and Measures 4		Use co-ordinates in all four quadrants Make a scale drawing and use scales Use three-figure bearings Draw plans and elevations Surface area of a cuboid Construct a triangle Find the midpoint of a line segment <i>Key vocabulary</i> scale, bearings, plans, elevations	GL assessment fortnight
		Solving Problems	Solve a range of mathematical problems <i>Key vocabulary</i> symbols, reasoning, justify	