Key Stage 3 Mathematics
2022-2023

	Year 7	Year 8	Year 9
Autumn Term 1	Mode, Median and Range	Calculations; Divisibility and Division	Indices Calculations and estimates
	Displaying Data	Calculating with Negative Integers	Standard form
	Grouping data	Powers, roots and brackets	Solving equations Substituting into expressions
	Grouping data Averages and comparing data Line graphs and bar charts	Multiples and factors	Writing & using formulae Rearranging formulae
	Line graphs & bar charts Mental Maths	Area of triangle Area of a parallelogram and trapezium,	Index laws and brackets
	Addition and Subtraction, Multiplication; Division	Volume of cubes and cuboids 2D representations for 3D solids	Expanding double brackets
Autumn Term 2	Money and time Negative Numbers	Surface of cubes and cuboids Measures	Planning a survey, Collecting data, Calculating averages
	Factors, Multiples, Primes Square numbers	Pie charts	Displaying and analysing data
	Functions, Simplifying expressions Writing expressions	Using tables	Presenting and comparing data
	Substituting into formula	Stem and Leaf diagrams, Comparing data	Enlargement, Negative and fractional scale factors
	Writing formula	Scatter Graphs	Percentages and Percentage change
	Decimals and rounding	Misleading graphs	Compound Measures
	Length, Mass, Capacity	One-Step Equations	Direct and Inverse Proportion
Spring Term 1	Scales and measures; Working with Decimals mentally Working with Decimals written	Two step equations	Using Scale Basic Constructions
	Perimeter, Area More units of Measure	Conversion graphs	Basic Constructions, Constructing triangles
	Comparing fractions	Distance-time graphs	Using accurate scale diagrams
	Simplifying fractions, Working with fractions	Line graphs	Nth term of arithmetic sequences Non-linear sequences
	Fractions & decimals	Real life graphs Curved graphs	Inequalities
	Understanding percentages	Ordering Decimals and Rounding	Solving equations
	Percentages of amounts	Place value Calculations, Calculations with decimals	Proportion

	Year 7	Year 8	Year 9
Spring Term 2	The language of probability, calculating probability, More probability calculations	Ratio and Proportion with decimals	Pythagoras' Theorem
	Experimental probability, Expected outcomes	Quadrilaterals, Alternate Angles and Proof	Prisms and Cylinders, Errors and bounds
	Direct proportion Writing ratios	Angles in parallel lines	Using y = mx + c Straight-line graphs,
	Using ratios	Exterior and interior angles	Simultaneous equations Graphs of Quadratic functions
	Ratios, proportions and fractions	Solving geometric problems	Graphs of Quadratic functions Non-linear graphs
Summer Term 1	Proportions and percentages	Ordering fractions Adding and subtracting fractions	Mutually Exclusive Events Experimental and theoretical probability Sample space diagrams
	Measuring and drawing angles Lines angles and triangles	Multiplying fractions,	Two-way tables Venn Diagrams
	Drawing triangles accurately Calculating angles	Dividing fractions	Congruent and similar shapes Ratios in triangles
	Angles in a triangle Angles in a Quadrilateral	Calculating with mixed numbers	The tangent ratio The Sine Ratio
	Sequences	Direct Proportion on Graphs	The Sine Ratio The Cosine Ratio
	Pattern sequences, Coordinates and midpoints, Extending sequences	Gradients Equations of straight lines	Using Trigonometry to find angles
Summer Term 2	Straight line graphs, Position-to-term rules	Fractions and decimals	Calculations, checking and rounding
	Congruency and enlargements Symmetry	Equivalent proportions	Indices, roots, reciprocals and hierarchy of operations
	Reflection and Rotation	Writing percentages	Factors, multiples, primes
	Translations and combined transformations	Percentages of amounts	Standard form - Calculations Surds (Higher Only)