

SUBJECT: Teaching, Learning and Curriculum Principles.

Maths
2019 - 2021



Pupils will focus on the core areas of the National Curriculum: Number, Algebra, Geometry, ratio, and proportion, rates of change, probability and Statistics. Pupils will learn how to represent, analyse and communicate fluently the mathematics that they are studying. We aim to share our passion and excitement for maths with pupils to set them up in good stead for the rest of their lives. We enable pupils to acquire the skills needed to reach their full potential to progress through the qualifications and give pupils the opportunity to experience studying mathematics at university if they express such an interest.

YEAR GROUP	SCHEME or QUALIFICATIONS	AUTUMN TOPICS	SPRING TOPICS	SUMMER TOPICS	ASSESSMENT
7		Place Value, integers & Calculations. Sequences & functions. Mental & written Calculations. Measures & Accuracy Fractions, decimals & Percentages. Lines, Angles and coordinates.	Planning, Collecting & processing data. Equations, expressions & formulae. Lines angles & construction. Ratio & proportion. Integers, powers, roots. Graphs	Transformations Representing & interpreting data. Probability. Sequences, functions & graphs. Lines, angles, construction & 3D visualisation.	Half termly tests of SATS papers.
8		Numbers & Sequences. Calculations & Place Value Fractions, decimals & Percentages. Expressions, equations & formulae.	Measures, scales, units & circles. Transformations. Angles & construction. Sequences, functions & graphs. Collecting & representing data.	Planning & processing data Problem solving Equations, functions & graphs. Geometrical & 3D visualisation. Probability.	
9		Place Value. Fractions, decimals & Percentages. Ratio & proportion Sequences & functions Integers, powers & roots. Equations, formulae & identities. Transformations Surveys & interpretation	Angles & construction. Measures, area & Volume. Transformations. Probability.	Functional skills. Problem Solving in preparation for GCSE.	
10	Edexcel Linear GCSE 1MA0 Higher or Foundation	Integers, decimals & calculations Angles, collecting data, charts & graphs. Converting units & Scales. Introduction to Algebra	Symmetry, similar shapes, types of number, constructions & loci, algebraic expressions. Sequences. Parallel lines & properties of quadrilaterals. Perimeter & area.	Fractions, decimals & Percentages. Pie charts, Formulae & linear equations. Linear graphs. Powers and brackets. Ratio & proportion. Equations & inequalities, Simultaneous equations, probability.	End of half term assessment based on a past GCSE paper.
11		Perimeter & Area. 3D shapes, real-life graphs, $y=mx+c$, averages & range, Pythagoras & trigonometry, trial & improvement, compound measures, surface area & volume, transformations, Distance- time graphs.	Probability, formulae, angle properties of polygons, transformations, similarity & congruence, quadratic functions, index notation & surds, scatter graphs, quadratic graphs, circle theorems, sine & cosine rule, vectors.	Trial & improvement, circles, Pythagoras' theorem, further graphs & functions, transformations of functions.	End of half term assessment based on a past GCSE paper.