Curriculum Overview | Mathematics

What will my child learn in Maths?

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 7	**Fractional thinking** ○ Probability ○ Factors, multiples, primes ○ Fractions (+/-)	**Algebraic thinking** ○ Directed number ○ Manipulating algebra ○ Exploring sequences	**Proportional reasoning** ○ Fractions (×/÷) ○ Proportion ○ Ratio ○ Scale diagrams		**Using shape** ○ Coordinates & introducing straight line graphs ○ Properties of shape ○ Notation/labelling conventions ○ Perimeter & area ○ Circles – area & circumference	**Fractional thinking** ○ Probability ○ Factors, multiples, primes ○ Fractions (+/-)
Year 8	**Delving into data** ○ Angle ○ Interpreting & comparing ○ Averages ○ Scatter graphs	**Formalising algebra** ○ Solve equations ○ Sequences (nth term) ○ Graphs of linear functions, y=mx+c	**Proportional relationships** ○ Percentages ○ Convert between fractions, decimals & percentages ○ Ratio – with linear functions & fractions ○ Units of measure		**Geometrical reasoning** ○ 3D shape ○ Volume ○ Angle, constructing triangles ○ Pythagoras	**Delving into data** ○ Angle ○ Interpreting & comparing ○ Averages ○ Scatter graphs
Year 9	**Working with number** ○ Rounding, estimation ○ Error Intervals ○ Standard form ○ Indices ○ Working algebraically ○ Expanding & factorising ○ Identities	**Numerical reasoning** ○ Percentages ○ Money ○ Probability ○ Finding probabilities ○ Frequency trees ○ Probability tree diagrams	**Working with data** ○ Statistical measures ○ Averages from frequency tables ○ Boxplots ○ Reasoning geometrically ○ Angles in parallel lines ○ Bearings ○ Constructions & loci	**Solving** ○ Solving equations ○ Solving inequalities ○ Simultaneous equations ○ **Sequences** ○ Linear nth term ○ Fibonacci, quad & geometry ○ Quadratic nth term	**Graphing** ○ Straight line graphs ○ Graphical solutions, parallel lines ○ Sketching graphs ○ Rearranging ○ Rearranging formulae ○ Units, compound measures	**Scaling** ○ Direct/inverse proportion ○ Similarity ○ Scale diagrams & maps ○ Visualising ○ Transformations ○ Plans & elevations ○ Surface area

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Year 10	**Properties of number** ○ Factors, multiples, primes ○ HCF/LCM ○ Bounds ○ Fractional & -ve indices ○ Surds ○ Pythagoras with surds ○ Rationalising the denominator	**Similarity** ○ Congruent, similar shapes ○ Enlargement ○ Trigonometry ○ FDP ○ Frac/percent op & change ○ Reverse percentages ○ Growth & decay ○ Recurring dec & frac	**Combinations & prob** ○ Systematic listing ○ Sample spaces ○ Venn diagrams ○ Product rule for counting ○ Probability trees (non-r) ○ Geometry ○ Circles ○ Area, volume ○ Volume/surface area	**Algebra & Graphing** ○ Straight line graphs – algebra review ○ Function notation ○ Solving quadratics ○ Real life graphs ○ Sketching quadratics ○ Perpendicular lines ○ Equation of circle, tangent	**Algebraic fractions** ○ Fractions review ○ Algebraic fractions ○ Complex rearranging ○ Visualising ○ Transformations ○ Invariance ○ Vectors, ops ○ Proof using vectors	**Pie charts, all bar charts** ○ Frequency tables ○ Cumulative frequency ○ Histograms ○ Polygons ○ Angles review, polygons ○ Circle theorems **Formal mocks**
Year 11	**H Algebra: Solving** ○ Completing the square ○ Iteration ○ Further sim equations ○ **Geometry** ○ 3D trig ○ Non right angled **F Algebra: Solving** ○ Simplifying, solving & rearranging, identities ○ Solving quadratics ○ **Geometry** ○ Area & volume review ○ Trig, exact values ○ Vectors ○ Arcs & sectors	**H Algebra: Graphing** ○ Composite, inverse functions ○ Transformations of graphs ○ Rates of change ○ Area under curve ○ Graphs of trig functions **F Algebra: Graphing** ○ Ratio, equations & graphs ○ Plotting graphs ○ Sketching inc cubic, reciprocal ○ Inequalities – solve & shade ○ **Formal mocks**	**Revision through reasoning and problem-solving:** ○ Multiplicative ○ Best buys, bank accounts, ratio with everything ○ Geometric ○ Reasoning with angle ○ Shape problems – add/split ○ Multi-step problems ○ Algebraic ○ Evaluation of others work ○ Proof	**Formal mocks** **Exam Revision**	**Final exams** Class level planning responsive to mock analysis, overseen and supported by maths subject leaders	**Final exams**