

**NUMBER - GEOMETRY & MEASURE - ALGEBRA - STATISTICS - PROBABILITY - RATIO & PROPORTION**

Where we are right now

	AUTUMN			SPRING					SUMMER					
<b>Year 7</b>	<b>Unit 1</b> • Baseline • Code breaking • Place value • Number grid inv. • Calculations	<b>Unit 2</b> Order of operations Introduction to Algebra Substitution Directed numbers Measures and scales	<b>Unit 3</b> Number properties Properties of shape Coordinates Brackets Christmaths	<b>Multiplication and division</b> • Multiplying by powers of 10 • Standard form • Converting Units • Area & Perimeter of 2D shapes • Mean, mode, median	<b>FDP</b> Tenths & hundredths Fractions and diagrams Converting FDP Simple FDP conversion Pie charts	<b>Fractions &amp; Percentages of amounts</b> Fractions of an amount Finding percentage of amount Mental methods Calculator methods Problem solving	<b>Addition and subtraction of amounts</b> Representations of fractions Equivalent and improper Adding and subtracting Add/subtract mixed numbers	<b>Constructing and measuring</b> Labelling drawing shapes Classifying/measuring angles Interpret pie charts Constructing triangles	<b>Developing geometric reasoning</b> • Angles at a point • Angles on a straight line • Angle in a triangle • Angles in a quadrilateral • Interior/exterior angles polygons	<b>Equations</b> Fact families one step equations two step equations Forming expressions Forming equations	<b>Number sense</b> Mental strategies Estimation Strategy selection Using known facts	<b>Sets &amp; probability</b> Probability scale Single events Sample space Venn diagrams Frequency trees Notation with sets	<b>Sequences</b> Describing and continuing sequences Sequences in a graph or table Continuing a linear sequence Continuing a non linear sequence Term to term rule	<b>Assessment</b> Fortnightly end of unit assessments Fortnightly exit ticket feedback Termly assessments
<b>Year 8</b>	<b>Unit 1</b> • Percentages • Money and finance • Algebraic manip. • 3D shapes • Index Laws & Surds	<b>Unit 2</b> Sequences Ratio and Proportion Averages and Measures of spread Perimeter and Area Standard form	<b>Unit 3</b> Set notation & Venn Rounding and estimation Volume & Surface area Solving equations Triangle properties	<b>Unit 4</b> • Straight line graphs • Transformations • Statistical Graphs • Inequalities • Speed, distance and time		<b>Unit 5</b> Bounds and error intervals Non Linear graphs Constructions and Loci Expanding brackets			<b>Unit 6</b> • Motion-Time graphs • Angles & Bearings • Probability • Two way tables and Frequency trees	<b>Unit 7</b> Angles in polygons Simultaneous equations Fractions, Decimals & Percentages Vectors		<b>Unit 8</b> Angles in parallel lines Fraction Arithmetic Solving quadratics Similarity and congruence	<b>Assessment</b> Initial diagnostic assessment at the start of each unit Fortnightly exit ticket feedback Termly assessments	
<b>Year 9</b>	<b>Unit 1</b> • FDP • Rounding and Estimation • Perimeter and Area • Algebraic manipulation • Ratio and proportion	<b>Unit 2</b> Fraction Arithmetic Averages/measures of speed Number properties Expanding brackets Factorising	<b>Unit 3</b> Sequences Straight Line Graphs Index Laws & Surds Measures, scales & conv. Percentages	<b>Unit 4</b> • Statistical graphs • Money and finance • Solving equation • Forming and solving including proof • Speed, distance and time		<b>Unit 5</b> Bounds and error intervals Non-Linear & Real life graphs Averages and statistical graphs Volume and Surface Area Inequalities			<b>Unit 6</b> Revision & Exam		<b>Unit 7</b> Triangle properties Standard Form Functions Angles in parallel lines Angles in polygons	<b>Unit 8</b> Probability & Tree Diagrams Two way tables and frequency tree Vectors Quadratics	<b>Assessment</b> Initial diagnostic assessment at the start of each unit Fortnightly exit ticket feedback Termly assessments	
<b>Year 10</b>	<b>Unit 1</b> • Percentages • Circles • Algebraic manipulation • Simultaneous equations • Pythagoras and trigonometry	<b>Unit 2</b> Constructions & Loci Probability and tree diag. Averages and Measure Volume & Surface area Straight line graphs	<b>Unit 3</b> Non Linear graphs Set notation and Venn diagrams Compound measures Solving equations Ratio & Proportion	<b>Vectors</b> • Drawing and describing vectors • Operations with vectors • Journeys in shapes • Understanding parallel lines • Exploring co-linear points • Geometric arguments & proofs	<b>Congruency, Similarity and enlargement</b> Enlarging shapes + SF Enlarging shapes by - SF Angles in parallel lines Similar shapes Area/Volume of similar shapes Congruent triangles & proof	<b>Angles, Bearings &amp; Measure</b> Compass and bearings Drawing and measuring bearings Scale drawings with bearings Calculating bearings using angle rules Solve bearing problems using trig Use Sine and Cosine rule with bearings	<b>Data</b> Construct a stratified sample Construct and interpret frequency tables and frequency polygons Construct and interpret pie charts Capture/recapture method		<b>Data</b> • Construct histograms • Interpret histograms • Averages from tables • Time series graphs • Stem and leaf diagrams • Cumulative frequency • Box plots • Scatter graphs	<b>Non calculator methods</b> Decimal multiplication and div. Exact answers, rational and irrational Surd Limits of accuracy Upper and lower bounds Multi-step problems	<b>Types of number sequences</b> Continue arith/geo sequences Explore other sequences Sequences involving surds Nth term of linear sequence Nth term of quadratic sequence Nth term of complex quadratic sequences	<b>Indices and roots</b> Higher powers and roots + & - rule for powers Power zero and neg indices Powers of powers Fractional indices Calculate with numbers in standard form	<b>Manipulating expressions</b> + & - algebraic fractions + & - complete alg fractions x & divide alg fractions Form and solve equations & inequalities with fractions Solve equations with alg. fractions Algebraic arguments	<b>Assessment</b> Fortnightly end of unit assessments Fortnightly exit ticket feedback Termly assessments
<b>Year 11</b>	<b>Unit 1</b> • FDP • Standard form • Surds • Rounding & Bounds • Types of number • Money  Angles properties Angles in parallel lines Indices Bearings Perimeter Volume Pythagoras & Trig		<b>Unit 2</b> Solving equations Sequences Indices Graphs Simultaneous equations Expand/factorise/solve Averages Range QRLLQUQ Grouped data/statistical graphs	<b>Unit 3</b> • Simplifying • Sharing • $nt \ln$ • Direct proportion • Inverse proportion • Recipes • Ratio problem solving • Ratio and fraction problem solving			<b>Revision using QLA</b>		<b>Revision using QLA</b>		<b>Exams</b>		<b>Assessment</b> Past papers are sat in lesson every fortnight 3 sets of mock exams	
	* Fortnightly past papers in class			* Fortnightly past papers in class										