

Maths

Year	Fi1 Number	Fi2 Algebra	Fi3 Ration, Proportion and Rates of Change	Fi4 Geometry and Measures	Fi5 Probability	Fi6 Statistics
7	<ul style="list-style-type: none"> Calculations with fractions, decimals and mixed numbers Factors/multiple prime factors Multiply and divide by 0.1 and 0.01 Find a fraction of an amount Find a percentage of an amount 	<ul style="list-style-type: none"> Function machines Collecting like terms Form and sole 1-step equations Represent functions graphically Recognise and generate sequences 	<ul style="list-style-type: none"> Multiplicative relationships Ratio notation Simplify ratios Convert metric units with ratio Tables 	<ul style="list-style-type: none"> Perimeter and area of rectangles Triangles Geometric notation Properties of 2D shapes Angle properties Simple angle proof 	<ul style="list-style-type: none"> Language of probability Sum of probabilities=1 Venn diagrams 	<ul style="list-style-type: none"> Line, bar and pie charts Mean, median, mode and range Types of data: discrete, continuous, qualitative and quantitative
8	<ul style="list-style-type: none"> Standard index form Metric units of length/area Express one number as a fraction of another Percentage increase/decrease 	<ul style="list-style-type: none"> More complex expressions Indices Expanding single bracket Conversion graphs Solve 2-step equations Find the nth term of a sequence 	<ul style="list-style-type: none"> Scale factors Maps and scale drawings Conversion graphs- currencies Similar shapes Direct proportions Split into a given ratio 	<ul style="list-style-type: none"> Circumference and area-circle Line symmetry and reflection Constructions Properties of quadrilaterals Angles in parallel lines and Polygons 	<ul style="list-style-type: none"> Construct and solve problems with sample space diagrams Solve problems with Venn diagrams and two-way tables Set notation 	<ul style="list-style-type: none"> Handling data cycle Construct and interpret Frequency tables, grouped, ungrouped and two-way tables Questionnaires
9	<ul style="list-style-type: none"> Rounding numbers (dp and sf) HCF and LCM Rational and real numbers Reverse percentage Repeated percentage change 	<ul style="list-style-type: none"> Change the subject of a formula Testing conjectures Expand a pair of brackets Form and solve equations with the unknown on both sides Simultaneous equations 	<ul style="list-style-type: none"> Solve direct and inverse proportion problems Compound measures- speed, density and pressure Growth and decay 	<ul style="list-style-type: none"> Surface area- cuboids Area- compound shapes Rotations and translation Properties of 3D shapes Pythagoras' theorem Geometric proof 	<ul style="list-style-type: none"> Theoretical and experimental Probability Frequency trees Sample space diagrams 	<ul style="list-style-type: none"> Calculate mean, median and mode from frequency tables Calculate estimates of the mean from grouped frequency tables
10	<ul style="list-style-type: none"> Upper and lower bounds Limits of accuracy Recurring decimals Calculations with surds Power and roots Calculations with standard form 	<ul style="list-style-type: none"> Factorise quadratic equations Simultaneous equations- Graphically Quadratic formula Completing the square Quadratic sequences 	<ul style="list-style-type: none"> Scale factors- similarity area and volume Compound interest Iterative processes 	<ul style="list-style-type: none"> Sectors- area and arc length Surface area- other 3D shapes Similarity and enlargement 3 figure bearings Trig- exact values Congruent triangles-proof 	<ul style="list-style-type: none"> Tree diagrams Mutually exclusive and Independent events Conditional probability 	<ul style="list-style-type: none"> Frequency polygons Time series Cumulative frequency Box plots Histograms
11	<ul style="list-style-type: none"> Product rule for counting "Show that" problems 	<ul style="list-style-type: none"> Kinematic formulae Composite/inverse functions Trig graphs Roots of quadratic/cubic graphs Equations of tangents and circle Transformation of graphs 	<ul style="list-style-type: none"> Gradient of a curve Estimate areas under a curve 	<ul style="list-style-type: none"> Plans and elevations "Show that/prove that" questions 		<ul style="list-style-type: none"> Describing populations Compare distributions