

Grade 4
Compound Interest and Depreciation
Indices
Prime Factors, HCF and LCM
Real Life and Distance Time Graphs
Inequalities
Forming and Solving Equations
Sequences (Nth Term)
Expanding and Factorising
Pythagoras
Angles in Parallel Lines
Angles in Polygons
Surface Area
Volume of a Prism
Cylinders
Loci and Construction
Bearings
Plans and Elevations
Averages from Frequency Tables
Probability
Scatter Graphs

Grade 5
Writing a Ratio as a Fraction or Linear Function
Direct and Inverse Proportion
Reverse Percentages
Standard Form
Speed and Density
Changing the Subject of a Formula
Expanding and Factorising Quadratics
Solving Quadratics
Drawing Quadratic Graphs
Drawing Other Graphs: Cubic/Reciprocal
Simultaneous Equations
Solving Simultaneous Equations Graphically
Midpoint of a Line Segment
Gradient of a Line
Equation of a Line
Spheres and Cones
Sector Areas and Arc Lengths
Similar Shapes (Lengths)
SOHCAHTOA (Trigonometry)
Exact trig values
Vectors
Probability Trees
Venn Diagrams

Grade 6
Recurring Decimals to Fractions
Fractional and Negative Indices
The Product Rule for Counting
Repeated Percentage Change
Expanding Triple Brackets
Parallel and Perpendicular Lines
Inequalities on Graphs
Similar Shapes (Area and Volume)
Enlarging with Negative Scale Factors
Circle Theorems
Cumulative Frequency
Box Plots
Capture Recapture

Grade 7
Surds
Bounds
Direct and Inverse Proportion
Quadratic Formula
Factorising Harder Quadratics
Algebraic Fractions
Rearranging Harder Formulae
Trigonometric and Exponential Graphs
Inverse and Composite Functions
Iteration
Finding the Area of Any Triangle
The Sine Rule
The Cosine Rule
Congruent Triangles
3d Pythagoras and Trigonometry
Histograms
Conditional Probability

Grade 8/9	
Quadratic Simultaneous Equations	Velocity Time Graphs
Transforming Graphs $y=f(x)$	Proof of the Circle Theorems
Proof	Perpendicular Lines and the equation of a tangent
Completing the Square	Vectors Proof Questions
The Nth Term of a Quadratic Sequence	Probability Equation Questions
Quadratic Inequalities	

<https://www.mathsgenie.co.uk/gcse.html>

<https://www.sparxmaths.uk/> Independent study