

# GCSE Maths Topic List

Grade 1 Foundation and Higher	Grade 2 Foundation and Higher	
Place Value	Adding Integers and Decimals	Properties of Solids
Ordering Integers	Subtracting Integers and Decimals	Nets
Ordering Decimals	Multiplying Integers	Angles on a Line and at a Point
Reading Scales	Dividing Integers	Measuring and Drawing Angles
Simple Mathematical Notation	Inverse Operations	Drawing a Triangle Using a Protractor
Interpreting Real-Life Tables	Money Questions	Reflections
Introduction to Algebraic Conventions	Negatives in Real Life	Rotations
Coordinates	Introduction to Fractions	Translations
Simple Geometric Definitions	Equivalent Fractions	Plans and Elevations
Polygons	Simplifying Fractions	Perimeters
Symmetries	Half-Way Values	Area of a Rectangle
Tessellations and Congruent Shapes	Factors, Multiples and Primes	Area of a Triangle
Names of Angles	Introduction to Powers/Indices	Area of a Parallelogram
The Probability Scale	Multiply and Divide by Powers of 10	Area of a Trapezium
Tally Charts and Bar Charts	Rounding to the Nearest 10, 100 etc.	Frequency Trees
Pictograms	Rounding to Decimal Places	Listing Outcomes
	Simplifying - Addition and Subtraction	Calculating Probabilities
	Simplifying - Multiplication	Mutually Exclusive Events
	Simplifying - Division	Two-Way Tables
	Function Machines	Averages and the Range
	Generating a Sequence - Term to Term	Data - Discrete and Continuous
	Introduction to Ratio	Vertical Line Charts
	Using Ratio for Recipe Questions	Frequency Tables and Diagrams
	Introduction to Percentages	
	Value for Money	
	Introduction to Proportion	

<b>Grade 3 Foundation and Higher</b>	Using Place Value	Volume of a Prism
Multiplying Decimals	Expanding Brackets	Angles and Parallel Lines
Dividing Decimals	Simple Factorisation	Angles in a Triangle
Four Rules of Negatives	Substitution	Properties of Special Triangles
Listing Strategies	Straight Line Graphs	Angle Sum of Polygons
Comparing Fractions	The Gradient of a Line	Bearings
Adding and Subtracting Fractions	Drawing Quadratic Graphs	Experimental Probabilities
Finding a Fraction of an Amount	Sketching Functions	Possibility Spaces
Multiplying Fractions	Solving Equations Using Flowcharts	Venn Diagrams
Dividing Fractions	Subject of a Formula Using Flowcharts	Pie Charts
BODMAS/BIDMAS	Generate a Sequence from the nth Term	Scatter Diagrams
Reciprocals	Finding the nth Term	Averages From a Table
Calculator Questions	Special Sequences	
Product of Primes	Exchanging Money	
Highest Common Factor (HCF)	Sharing Using Ratio	
Lowest Common Multiple (LCM)	Ratios, Fractions and Graphs	
Squares, Cubes and Roots	Increase/Decrease by a Percentage	
Working with Indices	Percentage Change	
Standard Form	Reverse Percentage Problems	
Decimals and Fractions	Simple Interest	
Fractions, Percentages, Decimals	Metric Conversions	
Percentage of an Amount (Calc.)	Problems on Coordinate Axes	
Percentage of an Amount (Non-Calc.)	Surface Area of a Prism	
Change to a Percentage (Calc.)	Volume of a Cuboid	
Change to a Percentage (Non-Calc.)	Circle Definitions	
Rounding to Significant Figures	Area of a Circle	
Estimating Answers	Circumference of a Circle	

<b>Grade 4 Foundation and Higher</b>	<b>Grade 5 Foundation and Higher</b>
Index Notation	Negative Indices
Introduction to Bounds	Error Intervals
Midpoint of a Line on a Graph	Mathematical Reasoning
Expanding and Simplifying Brackets	Factorising and Solving Quadratics
Solving Equations	The Difference of Two Squares
Rearranging Simple Formulae	Finding the Equation of a Straight Line
Forming Formulae and Equations	Roots and Turning Points of Quadratics
Inequalities on a Number Line	Cubic and Reciprocal Graphs
Solving Linear Inequalities	Simultaneous Equations Algebraically
Simultaneous Equations Graphically	Geometric Progressions
Fibonacci Sequences	Compound Interest and Depreciation
Compound Units	Loci
Distance-Time Graphs	Congruent Triangles
Similar Shapes	Sectors of a Circle
Bisecting an Angle	Trigonometry
Constructing Perpendiculars	Spheres
Drawing a Triangle Using Compasses	Pyramids
Enlargements	Cones
Tangents, Arcs, Sectors and Segments	Frustums
Pythagoras' Theorem	Exact Trigonometric Values
Simple Tree Diagrams	Introduction to Vectors
Sampling Populations	Harder Tree Diagrams
Time Series	Stratified Sampling

<b>Grade 6 Higher</b>	<b>Grades 8, 9 Higher</b>
Recurring Decimals to Fractions	Upper and Lower Bounds
Product of Three Binomials	Surds
Iteration - Trial and Improvement	Perpendicular Lines
Iterative Processes	Completing the Square
Enlargement - Negative Scale Factor	Algebraic Fractions
Combinations of Transformations	Simultaneous Equations With a Quadratic
Circle Theorems	Solving Quadratic Inequalities
Proof of Circle Theorems	Finding the nth Term of a Quadratic
Probability Using Venn Diagrams	Inverse Functions
Cumulative Frequency	Composite Functions
Boxplots	Velocity-Time Graphs
<b>Grade 7 Higher</b>	Pythagoras in 3D
Fractional Indices	Trigonometry in 3D
Recurring Decimals - Proof	Vectors
Rearranging Difficult Formulae	
Solving Quadratics with the Formula	
Factorising Hard Quadratics	
Algebraic Proof	
Exponential Functions	
Trigonometric Graphs	
Transformation of Functions	
Equation of a Circle	
Regions	
Direct and Inverse Proportion	
Similarity - Area and Volume	
The Sine Rule	
The Cosine Rule	
Area of a Triangle Using Sine	
And and Or Probability Questions	
Histograms	