Number · Geometry & Measures · Ratio, Proportion, Rate of Change
Algebra · Probability & Statistics

GCSE Maths Topic Checklist

Grade 1 (16)

- Place Value
- Ordering Integers
- Ordering Decimals
- Reading Scales
- Simple Mathematical Notation
- Interpreting Real-Life Tables
- Introduction to Algebraic Conventions
- Coordinates
- Simple Geometric Definitions
- Polygons
- Symmetry
- Tessellations and Congruency
- Names of Angles
- Probability Scale
- Tally Charts and Bar Charts
- Pictograms

Grade 2 (48)

- Adding Integers and Decimals
- Subtracting Integers and Decimals
- Four Rules of Negatives
- Multiplying Integers
- Dividing Integers
- Money Questions
- Introduction to Fractions
- Equivalent Fractions
- Simplifying Fractions
- Half-Way Values
- Factors, Multiples and Primes
- Multiplying and Dividing by Powers of 10
- Rounding to the Nearest Whole Number, 10, 100, 1000
- Rounding to Decimal Places
- Index Notation
- Algebra - Addition and Subtraction
- Index Notation (Algebra)
- Algebra - Multiplication
- Algebra - Division
- Function Machines
- Introduction to Ratio
- Using Ratio for Recipe Questions
- Introduction to Percentages
- Best Value (Easy)
- Introduction to Proportion
- Properties of Solids
- Nets
- Angles on a Line and at a Point
- Measuring and Drawing Angles
- Drawing a Triangle Using a Protractor
- Reflections
- Rotations
- Translations
- Plans and Elevations (Not on Ed IGCSE)
- Perimeters
- Area of a Rectangle
- Area of a Triangle
- Area of a Parallelogram
- Area of a Trapezium
- Frequency Trees
- Single Event Probability
- Mutually Exclusive Events
- Two-Way Tables
- Averages and the Range
- Data - Discrete and Continuous
- Vertical Line Charts
- Frequency Tables
- Frequency Polygon (Not on AQA, OCR, Ed IGCSE)

Grade 3 (62)

- Multiplying Decimals
- Dividing Decimals
- Listing Outcomes
- Product Rule for Counting (Not on Ed IGCSE)
- Ordering Fractions
- Adding and Subtracting Fraction
- Finding a Fraction of an Amount
- Multiplying Fractions
- Dividing Fractions
- BODMAS/BIDMAS
- Reciprocals
- Product of Primes
- Highest Common Factor (HCF)
- Lowest Common Multiple (LCM)
- Squares, Cubes and Roots
- Standard Form
- Fractions, Decimals and Percentages
- Percentage of an Amount
- Expressing One Quantity as a Percentage of Another
- Rounding to Significant Figures
- Estimating Answers
- Using Place Value
- Expanding Single Brackets
- Expanding and Simplifying - Single Brackets
- Expanding and Simplifying - Double Brackets
- Simple Factorisation
- Substitution
- Drawing Straight Line Graphs
- Gradient of a Line
- Drawing Quadratic Graphs
- Sketching Functions
- Solving Equations
- Changing the Subject of a Formula (Simple)
- nth Term of a Sequence (Linear)
- Exchanging Money
- Sharing using Ratio
- Ratios, Fractions and Graphs
- Increase/Decrease by a Percentage
- Percentage Change
- Reverse Percentage Problems
- Simple Interest
- Calculator Questions
- Best Value (Hard)
- Metric conversions
- Problems on Coordinate Axes
- Surface Area of a Prism
- Parts of a Circle
- Area of a Circle
- Circumference of a Circle
- Volume of a Prism
- Angles and Parallel Lines
- Angles in a Triangle
- Angle in Polygons
- Bearings
- Relative Frequency
- Possibility Spaces
- Venn Diagrams - Introduction
- Pie Charts
- Stem and Leaf Diagrams (Not on AQA, OCR, Ed IGCSE)
- Scatter Diagrams (Not on Ed IGCSE)
- Averages from Frequency table
- Estimate for the Mean

Grade 4 (19)

- Midpoint of a Line
- Forming Formulae and Equations
- Inequalities on a Number Line
- Solve Linear Inequalities
- Simultaneous Equations Graphically
- Fibonacci Sequences
- Compound Measures (Speed)
- Compound Measures (Pressure)
- Compound Measures (Density)
- Distance-Time Graphs
- Similar Shapes (Length)
- Constructions - Bisectors
- Loci (Not on Ed IGCSE)
- Draw a Triangle Using Compasses
- Enlargements
- Parts of a Circle
- Pythagoras' Theorem
- Tree Diagrams
- Time Series

Grade 5 (23)

- Negative Indices
- Error Intervals (Not on Ed IGCSE)
- Mathematical Reasoning
- Factorising and Solving Quadratics
- Difference of Two Squares
- Equation of a Straight Line (y=mx+c)
- Equation of a Straight Line (coordinates)
- Roots and Turning Points of Quadratics
- Cubic and Reciprocal Graphs
- Simultaneous Equations Algebraically
- Geometric Progressions
- Compound Interest and Depreciation
- Ratio Questions (Easy)
- Congruent Triangles (Not on Ed IGCSE)
- Sectors of a Circle
- Trigonometry
- Spheres
- Pyramids
- Cones
- Frustums
- Exact Trigonometric Values
- Column Vectors
- Stratified Sampling

Grade 6 (12)

- Recurring Decimals to Fractions
- Expanding Triple Brackets
- Iteration - Trial and Improvement (Not on Ed IGCSE)
- Iterative Processes
- Enlargement - Negative Scale Factor (Not on Ed IGCSE)
- Combinations of Transformations
- Circle Theorems
- Proof of Circle Theorems
- Probability using Venn Diagrams
- Cumulative Frequency
- Box Plots (Not on Ed IGCSE)
- Capture Recapture (Not on AQA, OCR, Ed IGCSE)

Grade 7 (18)

- Fractional Indices
- Changing the Subject of a Formula (Hard)
- Solving Quadratics with the Formula
- Factorising Hard Quadratics
- Algebraic Proof
- Exponential Graphs (Not on Ed IGCSE)
- Trigonometric Graphs
- Transformation of Functions
- Equation of a Circle (Not on Ed IGCSE)
- Inequality Regions
- Direct and Inverse Proportion
- Ratio Questions (Hard)
- Similar Shapes (Area and Volume)
- Sine Rule
- Cosine Rule
- Area of a Triangle Using Sine
- And and Or Probability Questions
- Histograms

Grade 8/9 (15)

- Upper and Lower Bounds
- Surds
- Perpendicular Lines
- Completing the Square
- Algebraic Fractions
- Simultaneous Equations with a Quadratic
- Solve Quadratic Inequalities
- nth Term of a Quadratic (Not on Ed IGCSE)
- Inverse Functions
- Composite Functions
- Interpreting Graphs
- Differentiation (Only on Ed IGCSE)
- Pythagoras in 3D
- Trigonometry in 3D
- Vectors

GCSE Maths Rocket