

# Number

## Standard form and indices

## Rounding and estimation

## Proportion

# Ratio and Proportion

# Algebra

## Coordinate geometry

## Sequences

## Statistical graphs and diagrams

## Probability

# Revision Checklist!

# Geometry

## Properties of shapes

## Solving equations

# Stats and Probability

**Properties of numbers**  
 Prime numbers  
 Product of prime factors  
 Multiples and factors  
 Highest common factor  
 Lowest common multiple

**Calculations and place value**  
 Understand place value of numbers  
 Column addition  
 Column subtraction  
 Four rules with decimals  
 Four rules with negative numbers  
 Multiplication and Division  
 Ordering decimals  
 Order of operations (BIDMAS)  
 Using a Calculator  
 Converting between fractions, decimals and percentages

**Ratio**  
 Writing a ratio  
 Simplifying and equivalent ratios  
 Find quantities in a ratio when given one value  
 Dividing into a ratio  
 Find quantities in a ratio when given the difference  
 Adding ratios

**Percentages**  
 Percentages of amounts  
 Percentage increase and decrease  
 Calculating the percentage change  
 Simple interest  
 Compound interest and depreciation  
 Reverse percentages

**Manipulation**  
 Collecting like terms  
 Simplify using index laws  
 Substitution  
 Writing expressions  
 Changing the subject  
 Expanding single brackets  
 Factorising single brackets  
 Expanding double brackets  
 Factorising quadratics  
 Listing integers in linear inequalities  
 Linear inequalities on a number line  
 Proof of identities

**Fractions**  
 Fractions of amounts  
 Simplifying and equivalent fractions  
 Ordering fractions  
 Adding and subtracting fractions  
 Adding and subtracting mixed numbers  
 Multiplying and dividing fractions  
 Multiplying and dividing mixed numbers

Square numbers and square roots  
 Cube numbers and cube roots  
 Indices  
 Negative indices  
 Reciprocals

Rounding  
 Estimation  
 Error Intervals  
 Upper and lower bounds

Best buys  
 Recipes and proportion  
 Conversion graphs  
 Direct and Inverse Proportion  
 Exchange rates

Coordinates  
 Plotting a straight line graph  
 Equation of a straight line from a graph  
 Equation of parallel lines  
 Equation of a straight line graph from the gradient and a point  
 Equations of a straight line graph from two points  
 Recognising quadratic, cubic and reciprocal graphs  
 Plotting quadratic, cubic and reciprocal graphs  
 Reading approximate solutions from a graph

Continue a sequence  
 Find and use linear nth term  
 Geometric sequences  
 Recursive sequences  
 Special sequences

Tally charts  
 Pictograms  
 Bar charts  
 Dual/composite bar charts  
 Scatter graphs and correlation  
 Line graphs  
 Drawing and reading pie charts  
 Two way tables  
 Sampling methods

The probability scale  
 Writing probability  
 Calculating probability  
 Listing outcomes and sample space  
 Relative frequency  
 Experimental and relative frequency  
 Probability tree diagrams  
 Complete and interpret Venn diagrams

**Angles**  
 Types of angles  
 Drawing and measuring angles  
 Angles in types of triangles  
 Angles in types of quadrilaterals  
 Angles in parallel lines  
 Angles in polygons  
 Bearings

Rotating a shape around a centre  
 Translation by a vector  
 Enlargement from a centre  
 Enlargements (including scale factor  $\frac{1}{2}$ )  
 Identify the transformation  
 Combined transformations

Manipulating vectors  
 Drawing Vectors

Function machines  
 Forming and solving equations  
 Solving all linear equations  
 Solving inequalities  
 Linear simultaneous equations  
 Graphical simultaneous equations  
 Solving quadratics by factorising

**Compound measures**  
 Speed distance time graphs  
 Density, Mass and Volume  
 Pressure, Force and Area

## Transformations

## Vectors

Names of 2D shapes  
 Lines of symmetry  
 Rotational symmetry  
 Tessellations  
 Labeling parts of a circle  
 Names of 3D shapes  
 Faces, edges and vertices  
 Plans and elevations  
 Congruent triangles  
 Similar shapes

**Constructions and loci**  
 Reading maps  
 Scale drawings  
 Constructions  
 Loci

## Trigonometry

Pythagoras' Theorem  
 SOHCAHTOA  
 Exact trig values

Find the mode  
 Find the median  
 Find the mean  
 Find the range  
 Finding missing values given the averages  
 Averages from a frequency table  
 Averages from a grouped frequency table  
 Advantages and disadvantages of averages

**Perimeter, area, volume and surface area**  
 Area of rectangles and squares  
 Area of parallelograms  
 Area of triangles  
 Area of a trapezium  
 Area of compound shapes  
 Perimeter of 2D shapes  
 Area and circumference of circles  
 Arc length and area of a sector  
 Metric conversions  
 Volume of cubes and cuboids  
 Volume of a prism  
 Volume of a cone  
 Volume of a cylinder  
 Volume of a sphere  
 Volume of pyramids  
 Surface area of cubes and cuboids  
 Surface area of prisms