

# Number

## Standard form and indices

# Geometry

# Revision Checklist!

# Ratio and Proportion

# Algebra

# 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

## Rounding and estimation

- Rounding
- Estimation
- Error Intervals
- Upper and lower bounds

## Proportion

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

## Coordinate geometry

- 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

## 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

## Standard form and indices

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

- Ordering numbers in standard form
- Multiplying and dividing standard form
- Adding and subtracting standard form

## Vectors

- Manipulating vectors
- Drawing Vectors

## Solving equations

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

## Sequences

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

## Compound measures

- Speed distance time graphs
- Density, Mass and Volume
- Pressure, Force and Area

## Transformations

- Reflections
- 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

## Constructions and loci

- Reading maps
- Scale drawings
- Constructions
- Loci

## Trigonometry

- Pythagoras' Theorem
- SOHCAHTOA
- Exact trig values

## Properties of shapes

- 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

## Averages and range

- 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

## Statistical graphs and diagrams

- 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

## Probability

- 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

## 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