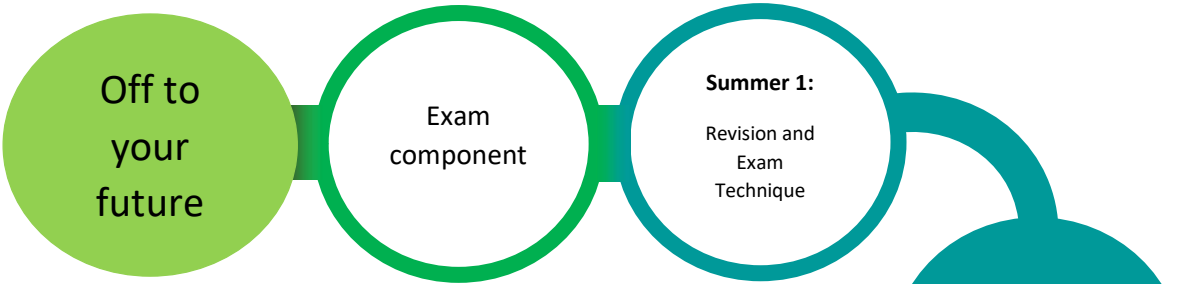


KS4 GCSE
Mathematics
 (Foundation)
2-year curriculum map



Year 11

Autumn 1:
 Probability.
 Multiplicative Reasoning.

Autumn 2:
 Constructions, Loci & Bearings. Quadratic Equations & Graphs.

Spring 1:
 Perimeter, Area & Volume 2. Fractions, Indices & Standard Form.

Spring 2:
 Congruence, Similarity & Vectors. More Algebra.

Exams

Summer 2:
 Ratio & Proportion. Right-angled Triangles.

Summer 1:
 Graphs. Transformations.

Spring 2:
 Averages & Range. Perimeter, Area & Volume 1.

Spring 1:
 Equations, Inequalities & Sequences. Angles.

Autumn 2:
 Graphs, Tables & Charts. Fractions & Percentages.

Autumn 1:
 Number. Algebra.

Year 10

- Calculating probability
- Two events
- Experimental probability
- Venn diagrams
- Tree diagrams
- Percentages
- Growth and decay
- Compound measures
- Distance, speed and time
- Direct and inverse proportion

- 3D solids
- Plans and elevations
- Accurate drawings
- Scale drawings and maps
- Constructions
- Loci and regions
- Bearings

- Expanding double brackets
- Plotting quadratic graphs
- Quadratic graphs
- Factorising quadratic expressions
- Solving quadratic equations

- Circumference of a circle
- Area of a circle
- Semicircles and sectors
- Composite shapes and cylinders
- Pyramids and cones
- Spheres and composite solids

- Multiplying and dividing fractions
- The laws of indices
- Standard form
- Calculating with standard form

- Non-linear graphs
- Simultaneous equations
- Rearranging formulae
- Proof

- Congruence
- Congruent triangles
- Similarity shapes
- Vectors

- Writing ratios
- Using ratios
- Ratios and measures
- Comparing using ratios
- Using proportion
- Proportion and graphs
- Proportion problems

- Pythagoras' theorem
- Finding lengths and angles using trigonometry

- Translation
- Reflection
- Rotation
- Enlargements
- Combining transformations

- Coordinates
- Linear graphs
- Gradient
- $y = mx + c$
- Real-life graphs
- Distance-time graphs

- Rectangles, parallelograms and triangles
- Trapezia and changing units
- Area of compound shapes
- Surface area of 3D solids
- Volume of prisms
- Surface area

- Mean and range
- Mode, median and range
- Types of average
- Estimating the mean
- Sampling

- Properties of shapes
- Angles in parallel lines
- Angles in triangles
- Exterior and interior angles

- Solving equations
- Solving equations with brackets
- Linear Inequalities
- Formulae
- Generating sequences
- Using the n th term of a sequence

- Working with fractions
- Operations with fractions
- Multiplying fractions
- Dividing fractions
- Fractions and decimals
- Fractions and percentages
- Calculating percentages

- Frequency tables
- Two-way tables
- Representing data
- Time series
- Stem and leaf diagrams
- Pie charts
- Scatter graphs
- Line of best fit

- Algebraic expressions
- Simplifying expressions
- Substitution
- Formulae
- Expanding brackets
- Factorising
- Using expressions and formulae

- Calculations
- Decimal numbers
- Place value and estimation
- Factors and multiples
- Squares, cubes and roots
- Index notation
- Prime factors

