Our Maths Learning Journey

Higher Education

Employment

Mathematical Studies (Enrichment course)
Optional

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A Level Further Maths
Pure – 75% (independent to regular Maths, running in parallel)
Applied – 25% (Decision, logic)

A Level Maths
Pure – two thirds (Algebra, trigonometry, calculus)
Applied – one third (Stats & Mechanics

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Foundation GCSE Content
Indices, Fractions, Algebra, Standard Form, Congruence, Similarity and Vectors. Then revision, revision, revision!

Higher GCSE Content
Vectors, Geometric Proof, Proportion, Graphs, More Trigonometry, Further Statistics. Then revision, revision, revision!

A Level Maths
Pure – two thirds (Algebra, trigonometry, calculus)
Applied – one third (Stats & Mechanics)

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Higher GCSE Content
Angles, Trigonometry, Algebra, Area, Volume, Transformations, Constructions, Equations, Inequalities, Similarity, Congruence, Circle Theorems.

Foundation GCSE
Graphs, Transformations, Ratio & Proportion, Pythagoras, Trigonometry, Probability, Multiplicative Reasoning, Perimeter, Area, Volume, Quadratics, Constructions, Loci and Bearings.

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Angles
Angles in parallel lines, angles in triangles and problem solving using exterior and interior angles.

Fractions and Percentages
All the functions with fractions. Calculating percentages with and without calculators.

Equations, Inequalities & Sequences
Solving equations including brackets and variables on both sides. Inequalities and finding the nth term of a sequence.

Averages & Range
Types of average, estimating the mean and sampling.

Algebra
Simplifying, substituting, using expressions and formulae, expanding and factorising.

Graphs, Tables & Charts
Representing data, pie charts, scatter diagrams, time series, two way tables and lines of best fit.

Angles and Shape
Alternate angles and proof. Exterior & Interior angles. Solving geometric problems.

Expressions and Equations
Expanding & Factorising, solving one and two step equations.

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Number
Calculations, decimals, index notation, factors & multiples, prime factorisation, squares, cubes & roots.

Straight Line Graphs
Direct proportion on graphs, gradients, equations of straight lines.

Decimals & Ratio
Ordering, rounding decimals. Place value calculations. Ratio and proportion with decimals.

Real life Graphs
Conversion, Distance-Time and Curved graphs.

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Probability
The language and calculating probabilities

Angles
Calculating angles in Triangles and Quadrilaterals

Number
Powers, Roots and divisibility

Fractions and Decimals
Fraction fluency including reciprocals understanding of place value

Ratio
Express multiplicative relationships as ratios

3D shapes
Reflections, rotations, enlargements and translations

Area & Volume
Area of triangles and quadrilaterals. Volumes and surface area of prisms.

Statistics
Pie charts, tables, stem & leaf diagrams, scatter diagrams and misleading graphs.

Geometry
2D Shapes, Area and Perimeter including Circles

BIDMAS

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Graphs
Co-ordinates, co-ordinate geometry, plotting co ordinates from a rule

Algebraic Skills
Writing expressions, simplifying and substituting into formulae, solving equations, sequences

Decimals
Decimals, length, mass, capacity, scales, converting fractions

Number Skills
BIDMAS, Money, Time, Negative Numbers, Multiples, Factors and roots

Welcome to Maths!