Your **Mathematics**
Foundation Tier
Journey

Further & Higher Education

Foundation mathematics supports many A-level choices and is a stepping stone to Core maths. Core maths is an enrichment option in many 6th form colleges which is seen by universities as a very beneficial qualification on application forms.

Careers

Almost all careers rely on the maths covered at foundation level as the skills underpin budgeting, finance, estimating and approximately, scheduleding and many other numerical applications.

Foundation Tier Route

Ratio, Proportion, Right-angled triangles, Pythagoras and Trigonometry

Quadratic equations: expanding and factorising, Quadratic equations: graphs, Circles, cylinders, cones and spheres, Fractions and reciprocals

Rearranging equations, Graphs of cubic and reciprocal functions, Simultaneous equations

AUTUMN — **SPRING** — **SUMMER**

Probablility, Multiplicative Reasoning, Plans and Elevations, Constructions, Loci and Bearings

Indices and standard form, Similarity and congruence, 2D Vectors

11

Real-life graphs, Straight-line graphs, Transformations

Tables, charts and graphs, Pie charts, Scatter graphs, Fractions, decimals and percentages

Non-Calc arithmetic, Estimating (nearest), Recurring Decimals, Rounding, SF and DP, Percentages (x/100, a/b, % of), Percentage Increase and decrease, Ratio (simplify, share, recipes)

SUMMER — **SPRING** — **AUTUMN**

Properties of shapes, parallel lines and angle facts, Interior and exterior angles of polygons, Statistics, Sampling and the Averages Perimeter, Area and Volume

Percentages, Equations and inequalities, Sequences

Indices, Powers and Roots, Angles (lines, points, triangles, etc), Circle Calculations, Algebra, Substituting, Simplifying (+; - ; x), Algebra Brackets, Linear Equations

10

Expanding Brackets, Volume, Probability, Changing the Subject

Straight Line Graphs, Indices, Compound Measures, Scatter Graphs

Plans & Elevations, Ratio & Proportion, Simultaneous Equations

AUTUMN — **SPRING** — **SUMMER**

Factorising, Loci (& review Constructions) , Percentages, Enlargements

Quadratic Equations, Other Cartesian graphs, Fractions, Sampling, Sequences

Inequalities, Trigonometry, Grouped Data, Time Series

9

Straight Line Graphs, Simultaneous Equations, Volume of Prisms

Bearings, Stem & Leaf Diagrams, Averages (and Spread), Scatter Graphs, Sampling Methods, FDP work

Equations and change subject Indices/Stand ard Form, Fractions (multiply / divide & mixed), Inequalities & Inequations

SUMMER — **SPRING** — **AUTUMN**

Pythagoras Theorem, Contructions, Factorising, Rounding & Estimating, Inference & Errors

Speed & DST graphs, Real-Life graphs, Transformations (all 4), Ratio, Circle calculations.

Probability & Sets, Changing the subject, Areas & Surface Area, Angles, Angle rules & Polygons, Bearings & Scale drawings , Stem & Leaf, Discrete Averages

8

Negative Numbers, Fractions, Collecting Terms, Properties of Numbers, Venn Diagrams

Coordinates & graphs, Parallel Lines, Formulae, 3D shapes, Forming Equations & Sequences

Statistical diagrams, Fractions, Data Analysis, Constructions, FDP analysis, Further Equations

AUTUMN — **SPRING** — **SUMMER**

7

Measure, Angle rules, Perimeter & Area, BIDMAS, Equations , Symmetry

Volume, Transformations, Decimals, Written Calculations (all operations, including decimals)

The Circle (vocabulary and Pi calculations), Probability, Frequency Trees

$\frac{1}{2} \times a \times h$

$a^2 + b^2 = c^2$

$f(x)$