

LONG TERM PLANS

Year Overview



Faculty: Mathematics

YEAR 10

Autumn term

FOUNDATION

Coordinates and Linear Graphs
 Direct and Inverse Proportion
 Scales and Standard Form
 Sequences
 Expanding and Factorising Brackets
 Changing The Subject of The formula
 Linear equations and Inequalities
 Simultaneous equations
 Quadratic and Other Graphs.

HIGHER

Coordinates and Linear Graphs
 Direct and Inverse Proportion
 Multiplicative reasoning including work with general iterative processes
 Scales and Standard Form
 Sequences including Fibonacci type and simple geometrical progressions
 Expanding and Factorising Brackets
 Changing The Subject of The formula
 Linear equations and Inequalities including quadratics
 Simultaneous equations
 Quadratic and Other Graphs, the equation of a circle; the equation of a tangent to a circle

Spring term

FOUNDATION

Constructions, loci and bearing
 Tables, charts and graphs; Pie charts; Scatter graphs
 Congruence and similarity
 Vectors
 Triangles and quadrilaterals; Properties of shapes, parallel lines and angle facts
 Angles in polygons
 Perimeter, area and volume
 Pythagoras and Trigonometry
 Transformations
 Simple proof

HIGHER

Constructions, loci and bearing
 Congruence and similarity
 Vectors
 Perimeter, area and circles
 Angles in polygons
 Perimeter, area and volume; 3D forms and volumes, cylinders, cones and spheres
 Accuracy and bounds
 Pythagoras and Trigonometry
 Transformations
 Simple proof

Summer term

FOUNDATION

Probability
 Mean from grouped data
 Comparing distributions
 Scatter graphs
 Revision

HIGHER

Probability
 Collecting data
 Mean from grouped data; Comparing distributions; Scatter graphs
 Cumulative frequency, box plots and histograms
 Graphs of trigonometric functions
 Further trigonometry
 Circle theorems and circle geometry
 Vectors and geometrical proofs
 Gradient and area under the graph; Exponential and reciprocal graphs