MATHEMATICS

Subject / Topic / Skills

Autumn Term

Number	Laws of indices and standard form
	Fractions, percentages and decimals
	Percentage increase and decrease
Algebra	Solution of linear and simultaneous equations
	Linear graphs
	Simultaneous equations: graphical methods
Data Handling	Probability — single events, two events, probability trees, Venn diagrams and set notation
	Averages, scatter graphs and lines of best fit
	Stem-and-leaf diagrams

Spring Term

Algebra	Linear, quadratic and geometric sequences
	Expansion of brackets
	Using formulae
	Linear and quadratic factorisation
	Solution of simple quadratic equations
Shape & Space	Area, perimeter and volume: formulae and applications. Constructions and loci
	Trigonometry
Data Handling	Frequency and grouped frequency tables
	Averages, quartiles, range and IQR
	Cumulative frequency and box plots
	Frequency polygons

Summer Term

Number	Estimation and approximation
Algebra	Plotting and sketching quadratic functions
	Quadratic inequalities
Shape & Space	Transformations

Throughout the Year

Use of non-calculator based methods as well as effective use of calculators – Mental arithmetic skills and practice – Oral discussions – Aural questions – Practical tasks – Problem-solving tasks – Investigational work on open-ended tasks