MATHEMATICS

Pupil year: **Upper 4 (Yr 9)**　　　　　　　　　Head of Department: **Dr P Merisi**

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

Spring Term

Algebra	Linear and quadratic sequences
	Expansion of brackets
	Using formulae
	Linear and quadratic factorisation
	Solution of simple quadratic equations
Shape & Space applications	Area, perimeter and volume: formulae and
	Constructions and loci
Data Handling	Cumulative frequency and box plots
	Frequency polygons and histograms

Summer Term

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

Throughout the Year

Use of non-calculator based methods – Mental arithmetic skills and practice – Oral discussions – Aural questions – Practical tasks – Functional skills tasks – Investigational work on open-ended tasks.