## **MATHS KS4**



	Autumn Term	Spring Term	Summer Term
Year 10 (Foundation)	<ul> <li>Calculations and decimals</li> <li>Basic algebra</li> <li>Shapes and area</li> <li>Presenting data</li> <li>Fractions</li> <li>Sequences</li> </ul>	<ul> <li>Rounding and estimating</li> <li>Circles</li> <li>Probability</li> <li>Metric measures</li> <li>Percentage</li> <li>Angles</li> <li>Ratio and proportion</li> </ul>	<ul> <li>Solving equations</li> <li>Multiples, factors and primes</li> <li>Indices</li> <li>Scatter graphs</li> <li>3D shapes and volume</li> <li>Straight line graphs</li> <li>Averages and range</li> </ul>
Year 11 (Foundation)	<ul> <li>Transformations</li> <li>Errors and accuracy</li> <li>Algebra recap</li> <li>Area and perimeter recap</li> <li>Fractions recap</li> <li>Gradient and y=mx+c</li> <li>Percentage change</li> <li>Pythagoras theorem</li> <li>Trigonometry</li> <li>Simultaneous equation</li> </ul>	<ul> <li>Standard form</li> <li>Inequalities and rearranging formulae</li> <li>Quadratics</li> <li>Ratio and proportion</li> <li>Bearings, constructions and loci</li> <li>Averages from frequency tables</li> <li>Volume and area of 3D shapes</li> <li>Compound measures</li> <li>Probability</li> <li>Vectors</li> </ul>	REVISION from workbooks and past papers
Year 10 (Higher)	<ul> <li>Area and perimeter of circles, sector and segments</li> <li>Scatter diagrams and correlation</li> <li>Probability</li> <li>Simultaneous equations – linear and quadratic</li> <li>Construction and loci</li> <li>Indices</li> <li>Cumulative frequency</li> <li>Surds</li> <li>Pythagoras</li> </ul>	<ul> <li>Equation of a circle</li> <li>Trigonometry</li> <li>Algebraic fractions</li> <li>Solving equations – linear and quadratic</li> <li>Inequalities – including graphical, linear and quadratic</li> <li>Percentages</li> <li>Sine and cosine rules</li> </ul>	<ul> <li>Sequences</li> <li>Standard form</li> <li>Histograms</li> <li>Transformations</li> <li>Quadratics, rearranging formulae and identities</li> <li>Iteration</li> <li>Circle theorems</li> </ul>
Year 11 (Higher)	<ul> <li>Venn diagrams</li> <li>Sketching graphs (including trig graphs)</li> <li>Ratio and proportion</li> <li>Vectors</li> <li>Transformations of graphs</li> <li>Volume and 3D shape</li> </ul>	<ul> <li>Gradients and rates of change</li> <li>Further equations and graphs</li> <li>Pre-calculus and area under a curve</li> <li>SET 1 only: Further Maths Level 2 candidates to cover matrices, differentiation, binomial theorem, trigonometric identities, solving trigonometric equations.</li> </ul>	REVISION from workbooks and past papers  It is expected that the majority of Set 1 will also be entered for the Further Maths Level 2 qualification alongside their GCSE Mathematics.  Most topics are covered throughout Years 10 and 11 in parallel and as an extension to the GCSE course.