

Maths Curriculum

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Summary	Number 1 Probability 1 Ratio 1	Fractions, Decimals, Percentages 1 Functional Maths related to number and ratio	Geometry 1 Statistics	Geometry 2 Ratio 2	Fractions, Decimals, Percentages 2 Algebra 1 Year 11 – targeted revision	Functional maths relating to all topics Algebra 2
Knowledge			<ul style="list-style-type: none"> -Students can measure and draw lines with a ruler. -Students can measure and draw angles with a protractor. -Students can identify parallel and perpendicular lines. -Students can identify a range of angles – acute, obtuse, reflex, right angle. -Students can solve angles on a straight line. -Students can solve angles around a point. -Students can solve increasingly complex angle questions, calculating a variety of angles. -Students can identify regular polygons. -Students can identify irregular polygons. -Students know the properties of polygons. -Students can identify 3D shapes. -Students know the edges, faces and vertices of 3D shapes: cube, cuboid, sphere, cylinder, cone, prisms. -Students know the names of 3D shapes. -Students can label, and understand the meaning of, the sections of a circle: circumference, radius, diameter, chord, arc, tangent. - Students can identify congruent shapes. -Students know interior and exterior angle rules for regular polygons. -Students understand what scale is. -Students can convert measurements e.g cm to m -Students can interpret scale drawings. 	<ul style="list-style-type: none"> -Students can construct a triangle using a compass, protractor and ruler. - Students can calculate area and perimeter of rectangles. -Students can calculate the area of a circle. -Students can calculate the circumference of a circle. -Student can calculate the area of sector lengths and arcs. -Students can calculate the area of compound shapes. -Students can measure bearings. -Students can calculate bearings between two points. -Students can draw bearings. -Students can calculate the area of trapeziums. -Students can reflect simple images. -Students can reflect from a given point. -Students can find the order of rotational symmetry. -Students can rotate shapes around a given point. -Students can translate shapes. -Students can draw enlargements of shapes. -Students can draw enlargements from given points. -Students can calculate the surface area of cuboids, triangular prisms, cylinders and spheres. -Students can calculate the volume of cuboids, prisms, cylinders and spheres. <p>Higher ability learners are explicitly taught Pythagoras theorem and trigonometry.</p>		

			-Students can construct scale drawings.			
Skills			Using a ruler to measure. Using a protractor to measure.	Using a ruler to measure. Using a protractor to measure. Using a compass to measure. Students can use tracing paper when solving transformations.		
Assessment			Entry level paper 7 Mock exam of questions based on taught content Stage tests Pre-knowledge check	Stage tests Post-knowledge check		
Intent			Build students' enjoyment and confidence in mathematics. Increase attainment in mathematics. To provide students with numerical literacy to support them in the 'real world'.	To provide students with numerical literacy to support them in the 'real world'. To reason and problem solve by applying mathematics to a variety of increasingly complex problems.		