



Year Group	Year 8					
Subject intent	<p>Our curriculum will enable students to:</p> <ul style="list-style-type: none"> - Learn within a coherent and exciting framework which does not limit students' ambitions. - Develop new skills through a variety of interesting contexts to foster enjoyment. - Develop a rich, deep and secure subject knowledge. - Understand what they are doing well and how they need to improve. - Explore the breadth and depth of the national curriculum. - Improve their spiritual, social, moral and cultural understanding to develop confidence in their own financial and numerical understanding 					
Subject Implementation	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Knowledge	<p><u>Year 8 Higher:</u></p> <ul style="list-style-type: none"> - Area and volume <p><u>Year 8 Intermediate:</u></p> <ul style="list-style-type: none"> - Area and volume <p><u>Year 8 Foundation:</u></p> <ul style="list-style-type: none"> - Area and volume 	<p><u>Year 8 Higher:</u></p> <ul style="list-style-type: none"> - Real-life graphs <p><u>Year 8 Intermediate:</u></p> <ul style="list-style-type: none"> - Real-life graphs <p><u>Year 8 Foundation:</u></p> <ul style="list-style-type: none"> - Real-life graphs 	<p><u>Year 8 Higher:</u></p> <ul style="list-style-type: none"> - Decimals and ratio <p><u>Year 8 Intermediate:</u></p> <ul style="list-style-type: none"> - Decimals and ratio <p><u>Year 8 Foundation:</u></p> <ul style="list-style-type: none"> - Decimals and ratio 	<p><u>Year 8 Higher:</u></p> <ul style="list-style-type: none"> - Lines and angles <p><u>Year 8 Intermediate:</u></p> <ul style="list-style-type: none"> - Lines and angles <p><u>Year 8 Foundation:</u></p> <ul style="list-style-type: none"> - Lines and angles 	<p><u>Year 8 Higher:</u></p> <ul style="list-style-type: none"> - Straight-line graphs <p><u>Year 8 Intermediate:</u></p> <ul style="list-style-type: none"> - Straight-line graphs <p><u>Year 8 Foundation:</u></p> <ul style="list-style-type: none"> - Straight-line graphs 	End of Exam preparation and consolidation tasks
Skills	Derive and use the formula for the area of a triangle, parallelogram and	Use and interpret conversion graphs. Interpret distance-	Round decimals to an appropriate degree of accuracy and to a given number of	Classify quadrilaterals by their geometric properties.	Recognise when values are in direct proportion with or	Revisit topics from previous learning to consolidate and / stretch students learning further.



	<p>trapezium.</p> <p>Calculate the area of compound shapes made from rectangles and triangles.</p> <p>Calculate the volume of cubes and cuboids.</p> <p>Sketch nets of 3D solids.</p> <p>Draw 3D solids on isometric paper.</p> <p>Calculate the surface area of cubes and cuboids.</p> <p>Solve problems in everyday contexts involving measures.</p>	<p>time graphs.</p> <p>Plot distance-time graphs from descriptive text.</p> <p>Plot line graphs from tables of data.</p> <p>Draw and interpret line graphs and identify trends, non-linear graphs from a range of sources, graphs from a range of sources.</p>	<p>significant figures.</p> <p>Order decimals of any size, including positive and negative decimals.</p> <p>Multiply larger numbers.</p> <p>Multiply and divide by decimals.</p> <p>Divide a quantity into three or more parts in a given ratio.</p> <p>Use ratios involving decimals.</p> <p>Solve ratio and proportion problems involving decimals.</p> <p>Use unit ratios.</p>	<p>Solve geometric problems using side and angle properties of special quadrilaterals.</p> <p>Identify corresponding angles and alternate angles on a diagram</p> <p>Understand proofs of angle facts.</p> <p>Solve problems using properties of angles in parallel and intersecting lines.</p> <p>Calculate the sum of the interior and exterior angles of a polygon.</p> <p>Work out the sizes of interior and exterior angles of a polygon</p>	<p>without a graph.</p> <p>Plot graphs and reading values to solve problems.</p> <p>Plot a straight-line graph and work out its gradient.</p> <p>Plot the graphs of linear functions.</p> <p>Write the equations of straight line graphs in the form $y = mx + c$.</p>	
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Subject Impact	<p>identify properties of the faces, surfaces, edges and vertices of: cubes, cuboids, prisms, cylinders, pyramids, cones and spheres</p> <p>construct and interpret plans and elevations of 3D shapes</p> <p>use standard units of measure and related concepts (length, area, volume/capacity, mass, time, money, etc.)</p> <p>know and apply formulae to calculate: area of triangles, parallelograms, trapezia; volume of cuboids and other right prisms (including cylinders)</p>	<p>identify and interpret gradients and intercepts of linear functions graphically and algebraically</p> <p>plot and interpret graphs (including reciprocal graphs and exponential graphs) and graphs of non-standard functions in real contexts to find approximate solutions to problems such as simple kinematic problems involving distance, speed and acceleration</p>	<p>Order positive and negative integers, decimals and fractions; use the symbols $=$, \neq, $<$, $>$, \leq, \geq</p> <p>Apply the four operations, including formal written methods, to integers, decimals and simple fractions (proper and improper), and mixed numbers – all both positive and negative; understand and use place value (e.g. when working with very large or very small numbers, and when calculating with decimals)</p> <p>Round numbers and measures to an appropriate degree of accuracy (e.g. to a specified number of decimal places or significant figures); use inequality notation to specify simple error intervals</p>	<p>Apply the properties of angles at a point, angles at a point on a straight line, vertically opposite angles; understand and use alternate and corresponding angles on parallel lines; derive and use the sum of angles in a triangle (e.g. to deduce and use the angle sum in any polygon, and to derive properties of regular polygons)</p> <p>Derive and apply the properties and definitions of special types of quadrilaterals, including square, rectangle, parallelogram, trapezium, kite and rhombus; and triangles and other plane figures using appropriate language</p>	<p>Plot graphs of equations that correspond to straight-line graphs in the coordinate plane; use the form $y = mx + c$ to identify parallel and perpendicular lines; find the equation of the line through two given points or through one point with a given gradient.</p> <p>Identify and interpret gradients and intercepts of linear functions graphically and algebraically</p> <p>Solve problems involving direct and inverse proportion, including graphical and algebraic representations.</p> <p>Use compound units such as speed, rates of pay, unit pricing, density and pressure.</p>	<p>Students are able to demonstrate the outcomes stated from autumn one to summer one.</p>
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			<p>due to truncation or rounding</p> <p>Divide a given quantity into two parts in a given part: part or part: whole ratio; express the division of a quantity into two parts as a ratio; apply ratio to real contexts and problems (such as those involving conversion, comparison, scaling, mixing, concentrations)</p>		<p>Interpret the gradient of a straight line graph as a rate of change; recognise and interpret graphs that illustrate direct and inverse proportion.</p>	
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Assessment	Summative and formative	Summative and formative	Summative and formative	Summative and formative	Summative and formative	Summative and formative
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