

<u>Overview Document</u> <u>2026/27</u>	Curriculum Area: Mathematics	Year Group: 9
	Personnel Responsible: Mr. J. Parpagga (Curriculum Director)	Quality Assured by: Mrs L.Francome (Assistant HeadTeacher)

Assessment Cycle	Topic/Unit Title – Big Question	Content Coverage	Skill development and links to other areas of this subject's curriculum
1	What Makes a Shape Unique?	- Use the standard conventions for labelling the sides and angles of triangle ABC - Perimeter and area of triangles, parallelograms, trapezia, volume of cuboids, cubes and other prisms e.g. cylinders. - Perimeters of 2-D shapes (including circles), areas of circles and composite shapes. - Interpret mathematical relationships both algebraically and geometrically	Students will start this cycle thinking about how to categorise certain 2D and 3D shapes, and looking at the limits of the definitions for each, so that they can recognize easily both regular and irregular shapes. They will also quickly begin applying their Algebra knowledge when using formulae in Geometry.
2	How Can Movement Be Described Mathematically?	- Perform and describe transformations: rotation, reflection, enlargement and translation. - Describe, sketch and draw: points, lines, parallel lines, perpendicular lines, right angles, regular polygons, and other polygons that are reflectively and rotationally symmetric. - Angles at a point, angles on a straight line, vertically opposite angles. - Angles in parallel lines: alternate, corresponding and co-interior. - Angles in triangles and other polygons. - Standard ruler and compass constructions (perpendicular bisector of a line segment, constructing a perpendicular to a given line from/at a given point, bisecting a given angle).	Cycle 2 builds on prior knowledge of Geometry, with a focus on angles, movement and turning. They will learn to apply key angle facts and transformations.
3	Does Maths Agree With Our Intuition?	- Graphical representation involving discrete, continuous and grouped data; mean, mode, median and spread (range, consideration of outliers). - Tables, charts and diagrams, including frequency tables, bar charts, pie charts, and pictograms, and vertical line (or bar) charts. Scatter graphs. - Probability, sample space and Venn Diagrams.	The results obtained by Probability and Statistics can sometimes be surprising, which highlights the need for these mathematical models that can show us deeper truths about the world we live in than we might expect, giving us conclusions that go deeper than what we may otherwise see. Fractions, Decimals and Percentages will be key, as well as Algebra skills such as solving equations and graphs.
4	What's So Special About Triangles?	- Congruent triangles. - Apply angle facts, triangle congruence, similarity and properties of quadrilaterals. - Pythagoras' Theorem and trigonometric ratios in right-angled triangles. - Solve problems in 3-D using properties of cubes, cuboids, prisms, cylinders, pyramids, cones and spheres.	Triangles are extremely important shapes, and the understanding of relationships between lengths and angles relies heavily on strong Algebra, Ratio and Number skills. These will be built upon to show the special relationships that triangles have, and to prepare students to look at more examples of this in Key Stage 4.