

Overview Document
2026/27

Curriculum Area: Mathematics

Year Group: 8

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	Is Maths Another Language?	• Simplify expressions • Substitution • Solve equations • Expand brackets and factorise. • Perimeter • Area • Properties of shapes • Time calculations	Students will explore expressions, substitution and simple algebraic manipulation. They will learn to use algebra as a mathematical language for representing patterns and solving problems. The cycle also strengthens number fluency through geometry and measure work. These skills provide the foundation for more advanced algebra, graphing and problem solving in Year 9.
2	How Can I Spot Patterns to Help Me?	• Sequences • Coordinates and midpoints • More complex equations • Forming and solving equations • Index laws • Statistical averages • Frequency tables	Students develop their ability to identify , describe and generalise patterns using algebra. This builds on Year 7 work with number patterns. Students begin making stronger links between algebra, number and graphical representations. Students also work on averages with data sets and represented on frequency tables.
3	How Can I Compare and Share Things Fairly?	• Ratio and proportion • Scale drawings • Properties of 3D shapes • Surface area • Volume • Unit conversions • Probability	This cycle develops proportional reasoning by building on the fractions, decimals, percentages and ratio work completed in Year 7. Students learn how mathematics can be used to compare quantities, solve measurement problems and make decisions. The geometry content supports future work on similarity, trigonometry and compound measures, while probability provides a foundation for later statistical studies.
4	How Can I Show What's Happening In Maths?	• Straight-line graphs • Inequalities • Angles and angle facts • Angles in polygons • Angles on parallel lines • Two-way tables • Pictograms	Students bring together many of the mathematical ideas developed across Key Stage 3. They learn how graphs can be used to represent patterns discovered through algebra and sequences. The geometry topics prepare students for more advanced reasoning and proof in Year 9. These skills are fundamental for GCSE Mathematics, where students are expected to combine algebraic, graphical and geometric methods to solve complex problems.