

# Programme of Study 2024- 2025



Subject: Mathematics

Year 9

## Autumn 1

Unit 1: Probability: Frequency tree, Expectation, Relative frequency, Theoretical Probability, Tree diagrams  
Unit 2: Ratio: Problem solving with ratios, Area/Lengths and ratio, Scale diagrams, Combine ratios  
Unit 3: Angles in Polygons: Interior and Exterior angles, Irregular polygons

## Autumn 2

Unit 4: Rearranging Formulae: Formulae and Equations  
Unit 5: Graphs: Parallel lines, Perpendicular lines, Gradient, Y-intercept, Types of graphs (cubic, reciprocal etc.), Equation of a line, Conversion graphs  
Unit 6: Proportional Reasoning: Direct and Indirect proportion

## Spring 1

Unit 7: Right Angle Triangles: Pythagoras' Theorem, Trigonometry  
Unit 8: Similarity and Congruence: Prove congruency, Enlargement, Similar shapes  
Unit 9A: Simultaneous Equations: Solving simultaneous equations, Worded problems

## Spring 2

Unit 9A: Simultaneous Equations: Solving simultaneous equations, Worded problems  
Unit 10: 3D Shapes: Solids, Nets, Plans and Elevation, Surface area, Volume  
Unit 11: Compound Measures: Convert units of length, weight and capacity, Speed distance time calculations, Distance Time Graphs

## Summer 1

Unit 12: Percentage and Money: Best buy, reverse percentage, simple Interest, Compound Interest  
Unit 13: Expanding Double Brackets: Expanding single brackets, Binomials, Area of shapes using algebra  
End of Year Exam

## Summer 2

Unit 14: Statistics: Mean, Mode, Median from grouped and ungrouped data, Scatter graphs  
Unit 15: Standard Form: Converting between standard form and ordinary numbers, Negative powers