# MATHS
# Plans for the KS3 Curriculum

**In Mathematics, a broad and progressive curriculum is delivered across all year groups. In Year 7, pupils are placed into four sets; in Year 8 and year 9, our cohort is organised into five sets. The table below provides an overview of the core knowledge and skills taught each half term. However, a more detailed breakdown of topics for each set could vary.**

| Year Group | AUTUMN 1 | AUTUMN 2 | SPRING 1 | SPRING 2 | SUMMER 1 | SUMMER 2 |
|---|---|---|---|---|---|---|
| 7 | Number skills, algebra introduction, rounding, and indices. | Shape with polygons, 3D solids, circles, substitution, sequences, measurement, and conversions. | Fractions, percentages, prime factorisation, HCF/LCM, formulae rearrangement, and algebraic reasoning. | Angles in shapes, probability with outcomes and tables, reasoning about shape and data. | Coordinates, symmetry, straight-line graphs, and transformations (reflections, translations, rotations). | Data handling, ratio and proportion, constructions, and introduction to Pythagoras. |
| 8 | Number work with decimals, indices, expanding brackets, solving equations, and directed numbers. | Fractions, percentages, ratio, sequences, and growth/decay contexts. | Area and volume of shapes, factorisation, rearranging formulae, and geometry-algebra links. | Angles, polygons, probability (Venn diagrams, tree diagrams, sample spaces). | Graphs (straight lines, real-life, simultaneous equations), transformations, and symmetry. | Data with frequency, box plots, scatter graphs, pie charts, constructions, loci, and compound measures. |
| 9 | Number revision (bounds, estimation), quadratic equations, simultaneous equations, and fractions. | Shape, ratio, circle theorems, similarity, data handling, and proportion scaling. | Percentages (compound, reverse), rearranging formulae, functional problems, and Pythagoras. | Geometry with prisms, cones, frustums, probability (tree, conditional, Venn), surds, and standard form. | Transformations, bearings, trigonometry (SOHCAHTOA, sine/cosine rules, exact values), inequalities. | Real-life graphs, loci, constructions, quadratic/cubic/reciprocal graphs, and exam review. |