

Y7 ROADMAP - Mathematics

Subject Aim: The aim of the Year 7 Maths curriculum is to build a solid foundation in key skills and concepts, setting students up for success in later years. It supports the move from Key Stage 2 by reinforcing core topics while introducing new content in a well-sequenced way. Through tailored practice, students develop fluency, confidence, and strong learning habits, supported by regular retrieval and focused revision.

TERM 1

How do manage my finances?

A key focus in this term is developing a deep understanding of number lines, which supports later work on interpreting scales and axes. Students will also consolidate their skills in rounding to significant figures and decimal places. Building on the formal calculation methods introduced at Key Stage 2, all students will apply these techniques to interpret and solve a variety of problems. For those with secure foundational skills, there will be a greater emphasis on problem-solving and application. The unit also introduces roots, powers, and the correct use of the order of operations.

TERM 2

How can a letter also be a number?

This term introduces students to the concept of using algebra to generalise mathematical ideas. The focus is on developing a strong understanding of basic algebraic structures, laying the groundwork for tackling more complex expressions later on. Students will learn to simplify expressions by collecting like terms and will be introduced to solving equations through the use of inverse operations—starting with one-step equations and progressing to two-step equations. The term then moves on to explore the concept of measure, followed by a study of 2D shapes and symmetry.

TERM 3

Averages, Estimation & Representing Data

A key focus this half term is developing students' understanding of statistical measures, including mode, median, mean and range, and applying these to solve problems. Students will also consolidate rounding to significant figures and use estimation to check the reasonableness of calculations. This is complemented by representing data using pictograms and bar charts, building fluency in interpreting and presenting information clearly.

TERM 4

Graphs & Introduction to Fractions, Decimals and Percentages

Students will deepen their understanding of data by interpreting scatter graphs, recognising correlation, and drawing lines of best fit. They will also explore time-series graphs and non-linear relationships. The unit then introduces key concepts in fractions, decimals and percentages, including representing tenths and hundredths and using number lines to support understanding of proportional relationships.

TERM 5

Fractions, Decimals and Percentages

This half term focuses on developing fluency with fractions, decimals and percentages. Students will work with equivalent fractions, compare and order values, and convert between forms. They will apply this understanding to calculate fractions and percentages of amounts, including finding the whole and solving problems in context. The emphasis is on secure number sense and multiplicative reasoning.

TERM 6

Measures: Perimeter, Area & Time

Students will develop their understanding of measures, beginning with perimeter and area of a range of shapes, including compound shapes. They will convert between metric units and apply their knowledge in problem-solving contexts. The unit then moves into time, including conversions and interpreting timetables, before introducing speed, distance and time, culminating in interpreting distance-time graphs.



ASSESSMENT

All lessons will assess understanding through a range of activities, including diagnostic questions, mini whiteboard tasks, and find-and-fix activities. Lessons are regularly punctuated with hinge questions, key statements, and opportunities for discussion. In addition to these ongoing checks for understanding, students will complete formal assessments at the start of the year and once each term.



INDEPENDENT LEARNING

Sparx Maths is used throughout the year to support independent learning, revision, and personalised "fix-up tasks" following assessments. Weekly independent learning on Sparx is closely aligned with lesson content and includes bespoke tasks tailored to each student's needs, with both the content and level of difficulty personalised. These tasks enable students to consolidate and revisit material most relevant to their individual progress. Knowledge Organisers are also used weekly to reinforce key vocabulary and support learning across the curriculum.



ENRICHMENT

- Maths challenge activities.
- Maths' relays allowing opportunity for problem solving.

What Next? Having built a strong foundation in key mathematical skills during Year 7, students will continue to develop and apply these in Year 8, building on prior knowledge through the spiral curriculum. They will begin to justify their answers using logical reasoning and proof-based approaches.