



KS3 and KS4

Welcome to Mathematics at St. Thomas More.

At STMCA, we want to ensure students are confident mathematicians who enjoy the subject and possess the skills that they will need to be successful in their future lives, so that students are able to recognise the significance of mathematics to their own lives and to society.

At KS3 (Y7-9) we build on the key concepts from KS2 to ensure that all students develop a wide range of mathematical skills, improving both their fluency and confidence in the subject. The curriculum ensures that all students have a strong understanding of numeracy and proportional reasoning which feeds into all other mathematical elements of algebra, geometry and statistics.

The curriculum at KS4 is designed to further build upon student understanding to fully master mathematics, allowing opportunities to recall, revisit and extend previous learning. By the end of KS4 all students will be:

- self-analytical, thoughtful and independent
- able to apply their skills to the wider world, love learning and exploring their capabilities within mathematics.
- ready for their next phase of learning or destination

Curriculum Content:

- **Number**– Including numerical skills with all varieties of number, numerical fluency, and applications of number.
- **Algebra**– Including linear and quadratic equations/expressions, creation and uses of graphs, coordinate geometry and strategic problem solving.
- **Multiplicative Reasoning**– Including ratio, proportion, currency conversion, algebraic proportion, value for money, percentages and financial skills.
- **Geometry and Measure** – Including area, volume, angle facts, construction, transformation and applied measure.
- **Probability and Statistics** – Including representations of data, interpretations of data, effective sampling, analysis of chance and using analysis of data/chance to make informed judgements.

Logistics

Year 7 students will have 8 hours of Maths lessons per fortnight.

Independent Learning

We use Hegarty Maths, an online extended learning platform. Students have access to all Mathematics topics to watch videos, make notes and complete quizzes. Hegarty Maths will then suggest next tasks, or suitable building blocks to ensure students can access topics. Hegarty Maths will then start to generate ideas about weakest and strongest topics which will help students to focus on the areas they