



MATHS

INTENT STATEMENT

Gunnersbury's Catholic School Mission Statement

"Gunnersbury Catholic School strives to educate all its pupils within an environment where the Catholic traditions of learning, truth, justice, respect and community are promoted."

'Ad Altiora' - 'To Higher Things.'

- Every Catholic school has a mission statement that encapsulates its distinctive job or core purpose.
- The mission statement **puts faith at the heart of all we do at school** and incorporates our school motto.
- It speaks of inclusivity and respect, that we understand as important Gospel values.
- It reminds us that Christ is at that centre of all that we do and by extension, as his creations we are all obligated to treat every member of our community with respect and love.
- It speaks of our aspirations for all in our community and our will to do all we can to make these a reality

Intent

Mathematics is an extremely creative and highly inter-connected subject that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, significant to science, technology and engineering, and fundamental for financial literacy and most forms of employment. It helps us understand and change the world for the better.

In order to achieve this, here at Gunnersbury Catholic School, we have two main aims:

1. All students become fluent in the fundamentals of mathematics through varied and frequent practice. Our schemes of work increase in complexity over the years so that pupils develop a conceptual understanding and the ability to recall and apply knowledge in order to solve problems rapidly and accurately. Students will be able to apply their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and become determined in finding solutions.
2. All students are able to reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and develop and present an argument, justification or proof using mathematical language.

Implementation

Our curriculum is shaped in order to enable our intent so that all children, regardless of background, ability or additional needs, flourish to become the very best version of themselves that they can possibly be.

We teach the National Curriculum, supported by a clear skills and knowledge progression. This ensures that skills and knowledge are built on year by year and sequenced appropriately to maximise learning for all children.

Mathematics is a core subject in the National Curriculum and as a school we follow the objectives from this to support our planning and assess children's progress. Y7-Y11 follow a long-term plan to ensure coverage of all areas of the National Curriculum. The schemes of work for years 7-11 are written to support teachers' medium- and short-term planning alongside the use of the Collins text books. For years 12-13, the schemes of work have been written based on the Pearson/Edexcel text books.

We believe all students can achieve in mathematics, and teach for secure and deep understanding of mathematical concepts through manageable steps. In order to establish students' written and mental arithmetic, calculators are not used every lesson. The expectation is that the majority of pupils will move through the programme of study at broadly the same pace. We do however have two schemes of work at key stage 3 and 4 for students to follow based on their ability. There is a general guidance of how long teachers spend on topics, however, decisions about when to progress are made by individual teachers and are always based on the security of pupils' understanding and their readiness to progress.

Pupils who grasp concepts rapidly will be challenged through being set rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent will consolidate their understanding through additional practice, before moving on.

Our programme of study for key stage 3 is organised into distinct domains where pupils will build on their key stage 2 knowledge, developing connections across mathematical topics and ideas. At key stage 4, students will build on their key stage 3 knowledge and consolidate their fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also be able to apply their mathematical knowledge in other subjects such as science, geography and computing as well as in financial contexts in school and at home. Together, the mathematical content set out in the key stage 3 and key stage 4 programmes of study covers the full range of material contained in the GCSE Mathematics qualification.

Assessment and evaluation are a key area in implementing our aims. The department continually assesses and evaluates student performance and the mathematics curriculum. Marking is carried out regularly with students receiving feedback in accordance with the school's marking policy.

Assessment is an integral part of teaching and learning and is a continuous process.

Daily mathematics lessons are inclusive to pupils with special educational needs and disabilities. The department works closely with the SEND department to enhance the prospects of more able and less able students by adopting different teaching strategies for individuals. Maths focused intervention in school helps children with gaps in their learning and mathematical understanding. These are delivered by trained support staff and overseen by the head of department and SENCO and/or the class teacher. Positive attitudes towards mathematics are encouraged, so that all children, regardless of race, gender, ability or special needs, including those for whom English is a second language, develop an enjoyment and confidence with mathematics. This policy is in line with the school's Equality and Diversity policy.

Impact

By the end of key stage 4, our students will have met our two intentions through our implementation of the National Curriculum. They will be fluent in the fundamentals of mathematics with a conceptual understanding and the ability to recall and apply knowledge rapidly and accurately. They will have gained the skills to solve problems by applying their mathematics to a variety of situations with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios. Our students will be able to reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language. After completing KS5 mathematics, most students will take on mathematics or a maths related area with the confidence that they are equipped with the knowledge and tools to overcome future challenges.