

MATHEMATICS DEPARTMENT

CANDIDATE INFORMATION

SCHOOL VISION

William Farr (C of E) Comprehensive School's vision is to provide all members of the school community with the opportunities to engage with 'life in all its fullness' (John 10:10) through the highest quality of education, encouragement and endeavour. We are committed to striving for excellence and ensuring that all students are known, valued and can achieve.

SCHOOL VALUES

Our core values are: Compassion Friendship Perseverance Respect Responsibility Wisdom Each value is associated with one of our Houses.

The students consistently attain high standards of grades, and their behaviour in lessons and around the school is exemplary - not only do they respect one another, but they have respectful and excellent relationships with all the staff.

THE MATHEMATICS DEPARTMENT

The Mathematics department is a friendly, supportive and forward-looking team. The sharing of ideas and teaching strategies is a key feature of the department.

The department has a high profile within the school as a high-achieving subject at all levels, but also for our student-centred focus and camaraderie. All members of the team take responsibility for an aspect of the department's work, enabling us to offer our students a wide range of mathematical opportunities within and beyond the curriculum. Mathematics is popular with the students, who engage well with lessons and demonstrate a 'can-do' approach to the subject. The department is very supportive and students know that they are welcome to ask for help outside of lessons and anyone who is available will assist them.

There are twelve subject specialist teachers, all of whom teach across the age and ability range. Mathematics is led by a Head of Department and two Assistant Heads of Department and also benefits from having an admin support assistant. It is accommodated in a modern, purpose-built environment, together with a departmental office ("The Lyons Den' – named after Mr Lyons, a much missed former member of the department), which forms the heart of the department. Each full-time member of staff has their own teaching room and is provided with a laptop, data projector and interactive whiteboard. There are textbooks and associated materials to match the Key Stage 3 curriculum and the specifications in KS4 and KS5, IT resources, including three laptop trolleys, calculators and practical equipment. The department is very much a team who work well together. The sharing of new ideas and resources is common and there is a weekly 'show and tell' session to share good practice.

As a department we strive to:

- o create an atmosphere of mutual respect between students and staff.
- o plan and deliver lessons that are engaging, challenging and enjoyable for students and staff.
- o provide constructive assessment and feedback to support students' progress.
- o motivate students to work collaboratively, to support each other and to celebrate each other's successes.
- o develop students into resilient learners who use mistakes to develop a deeper understanding of our subject.
- o encourage students to take greater responsibility for their learning, becoming independent learners who have a love of learning.
- o inspire every student to enjoy and achieve their very best in Mathematics.

The department aims to enthuse the students through memorable lessons and encourages commitment to hard work in the subject and well-deserved success.

THE MATHEMATICS CURRICULUM

The department aims to foster an appreciation of Mathematics amongst our students, as well as to develop the mathematical knowledge and skills that they need in order to achieve their potential.

Detailed schemes of work, tiered assessments, student tracking and teaching resources are in place across all key stages. The programmes of study are designed to provide a framework within which teachers can choose how to plan and deliver their lessons, drawing on their individual strengths. The professionalism of staff is respected and all have flexibility in how they plan their lessons and teach the course content.

In Key Stage 3, students are taught in ability groups from very early in Y7 with all following a common programme of study, which places a real emphasis on differentiation and the development of problem-solving skills, alongside mathematical content. At GCSE, students follow the OCR J560 specification with the schemes of work written in a graduated style to encourage progression and review. The course is organised to allow a second mock examination and a full revision programme to be delivered through lessons.

Mathematics is usually one of the most popular options in the Sixth Form. There are currently 75 places being taken up on the Mathematics and Further Mathematics A level courses. The department follows the AQA specifications (7357/7367). Each A level class has two teachers who split the pure content and each teaches a separate applied strand. In Further Mathematics, one teacher covers the further pure content whilst the other teaches both further mechanics and discrete mathematics. Further Mathematics students are taught Mathematics and Further Mathematics in parallel. The majority of A level students in the school study 3 subjects, but some are allowed to take 4 subjects and these students typically take Further Mathematics.

BEYOND THE CURRICULUM

The department offers a number of activities to engage students with Mathematics.

All top sets are entered for the UKMT Maths Challenges in Years 7 - 11 and all A level Mathematics students sit the Senior Maths Challenge, with students frequently reaching the follow-on rounds. We regularly enter teams in the regional team challenges and have had a team progress to the national finals. There are some lunchtime sessions over the year to prepare and select students in each key stage for the regional team challenges. Mathematics regularly enters a number of teams for the National Cipher Challenge and we offer a GO puzzle club.

ACHIEVEMENT

Examination results are consistently high in the department and are amongst the best in the school.

The 2020 GCSE results were Centre Assessment Grades, but these were awarded in line with the examination results achieved since the most recent changes in the Mathematics GCSE and A level specifications.

At GCSE, 85% of students achieved a grade 4 or better, 66% of students achieved a grade 5 or better and 25% of students achieved a grade 7 or better.

At A level, in Mathematics there was a 100% pass rate, 57% A* - B. In the Further Mathematics course, students were awarded three A* grades and two B grades.

PSME

In addition to teaching within the department, the successful candidate will be expected to contribute to the school's Care and Guidance programme, including the delivery of PSME (Personal, Social and Moral Education) as part of his or her form tutor responsibilities.

"William Farr Church of England Comprehensive School is one of the best schools in the country at outperforming expectations for their pupils and improving their future prospects.
There is plenty that other schools could learn from William Farr Church of England Comprehensive School's success."
Sue Williamson, Chief Executive of SSAT
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