Mathematics Learning Area

LEARNING AREA

The Mathematics Learning Area comprises of 6 study rooms and a Learning Base, suitable for another 3 classes. Every teaching area has an interactive Smart whiteboard with each study room equipped to teach 26 students. Full, high speed Wi-Fi coverage allows suites of laptops to be used anywhere in the Academy. The Learning Base can hold up to 82 students being team taught at any one time. We even have a dedicated outside learning space for Mathematics.

The Mathematics Department is extremely well resourced with various media, equipment, programs and subscriptions to on-line resources readily available. In addition to this, our team is highly creative, dynamic and effective. Excellent teaching further complements students' motivation towards success and achievement. Year on year improvement is evident through results at GCSE and AS/A2.

STAFFING

The Mathematics department is made up of 14 members of staff, 12 full time and 2 part time. There is a Head of Department, supported by the Second in Department, a Lead for KS5, and a KS4 Lead. There is a wealth of experience and knowledge with majority of the department having a mathematics or a mathematics related degree. The department benefits from having staff who are instrumental to the wider school life.

EXAMINATION RESULTS

The department continues its journey to strive for excellent GCSE results. A review and amendment of curriculum is proving successful as results are improving as the years progress.

In 2019 64% of students achieved a grade 9-4 at GCSE, this improved to 71% in 2022.



Mathematics Learning Area

TEACHING AND LEARNING

Key Stage 3

Year 7 and 8 students are taught in mixed ability, this changes to sets in Year 9 where students are grouped in three bands based on attainment, ability and individual progress. The Key Stage 3 scheme of work follows the National Curriculum and has been created with GCSE success in mind. Students in Year 7 and 8 receive a broad and balanced curriculum of mathematics.

Key Stage 4

Our Key Stage 4 students have a minimum of four hours of Mathematics each week with some students having an extra one and a half hour session to support their learning of Mathematics. The schemes of work for Key Stage 4 have been amended to ensure we continue to improve our results but more importantly enable students to achieve a proficiency in mathematics that grants them to the next stage of their education and function mathematically in life.

Key Stage 5

We have an excellent uptake of Mathematics in the Sixth. We follow the Edexcel board for our A level courses. GCSE Mathematics is offered to any new students who have not achieved a grade 4-9 before joining the Sixth Form. In addition to this we offer Core Mathematics which is the equivalent of an AS level.

ENRICHMENT

A level students have had the opportunity to visit Bletchley Park to see an Enigma Machine in operation and gain an insight into the use of mathematics applied by Alan Turing. Students will also benefit from visiting the Silverstone Race Circuit and attending a bespoke mathematics class they offer. Students take part in events organised by the Further Mathematics Support Programme; these involve quizzes and enrichment days. Further links with universities and opportunities for learning outside the classroom are planned this year. There is a full programme of Session 3 activities for all students. Students who are particularly gifted in mathematics take part in the annual UK Mathematics Challenge and have received nationally recognised awards.