

Maths at King Egbert School takes pupils through a carefully sequenced curriculum, following the work done by primary schools, so learners can continue to build on the skills and knowledge already learnt. Our teachers create an ethos where pupils enjoy their Mathematics and can become successful and inquisitive learners.

All pupils, irrespective of background, can and do succeed in Mathematics at KES. We work and support pupils with their learning, from those in Year 7 who may have significant gaps in their knowledge to those working towards studying Maths at Oxbridge in Year 13 and all pupils in between. KES has the expertise to support all learners to move into the next stages of their education and into the varied career paths on offer.

We aim to not only prepare pupils to be successful in external exams but also teach them the wider skills of Maths so they can be successful in the modern world. Whether that is the key skill of problem solving or their algebraic proficiency to take Maths, Science or Engineering into University.

All pupils have the right to study Mathematics until 18. We offer Mathematics to all pupils who choose to stay at KES to study post 16, whether that is Core Maths or A Level Maths.

We provide enrichment opportunities for our pupils to work with others nationally to develop their skills outside the Maths classroom. We have strong links with the local Mathshub, Sheffield University, the UKMT and the AMSP.

Key Stage 3

Year 7 and Year 8

- Our carefully sequenced Scheme of Learning in Y7 and 8 includes three sections to support learners. Access, Core and Depth. Access is the prerequisite skills and knowledge needed to access that particular topic and for some pupils is an important starting point in a particular area of Maths. All pupils are taught the Core content with those who become proficient investigating the Depth material which focusses on problem solving and reasoning. Each new topic is built carefully from previous work to interleave skills and knowledge already learnt.
- Low stakes tests take place at the end of each unit in Y7 and 8 to support the teachers planning and to check what knowledge and skills have been learnt. Lessons are set aside to reflect on this test and reinforce understanding where needed.
- A Knowledge Organiser runs alongside the Y7 and 8 curriculum covering all of the core content pupils are expected to know.

Students are taught in in groups based on their ability and have four lessons of Maths each week.

Year 9

- In Y9 the Scheme of Learning builds on what has been taught at Y7 and Y8 and continues to introduce new topics building up to the GCSE paper at the end of Y11 to ensure all relevant areas have been taught. Staff have the flexibility to teach the breadth and depth needed for learners to be successful in different ability groups. Pupils are assessed termly during Y9 to help with setting and tier entry decisions and the two tiers begin to follow slightly different pathways to ensure all topics are covered in the most rigorous and effective manner. Staff use the performance on the assessments to inform their subsequent teaching.
- Each teacher uses these overviews to carefully sequence a unit for their class. This ensures that the pace and depth is appropriate for the pupils in that particular group before moving on.

Students are taught in groups based on their ability and have three lessons of Maths each week.

Key Stage 4

GCSE Mathematics in Years 10 and 11

Students follow the Edexcel course 1MA1 and will complete either the Foundation or Higher tier course.

In Y10 and Y11 the Scheme of Learning builds on what has been taught at Key Stage 3 and continues to introduce new topics building up to the GCSE paper at the end of Y11 to ensure all relevant areas have been taught. Staff have the flexibility to teach the breadth and depth needed for learners to be successful in different ability groups. Pupils are assessed termly during Y10 to help with setting and tier entry decisions. Staff use the performance on these to inform their subsequent teaching.

Students in Year 11 will spend the majority of the time revising and finishing the scheme of work if applicable. Staff will use their professional judgement to decide which key topics to work on. Their decisions will be helped with analysis from the December mock examinations.

To access our Scheme of Learning please click the link at the bottom of this page.

Key Stage 5

At KS5 we offer Maths and Further Maths at A level. In both years students following the course receive 5 x one hour lessons, blocked in a 3 and a 2. A Level maths is made up of Pure (Two 2 hour papers) and a 2 hour paper made up of a mixture of statistics and mechanics. This is all examined at the end of the two year course. AS is available but we encourage all pupils to complete the full A Level.

We also offer core maths which is equivalent to an AS for those who want to continue their mathematics or are looking at a degree course which would benefit the continuation of their use of maths. It is a course designed to look at more real life applicable maths that most people will/could use as part of their everyday work. It supplements the science subjects very well if you are not already doing maths. It consists of four lessons every week and will be fully examined at the end of year 12.

Information for all years

The ability and needs of each group will dictate the depth and pace that topics are covered and staff will use their professional judgement to plan this. In some cases staff will extend beyond the scheme of work if they feel these topics have been mastered. Students are assessed towards the end of each term and we look closely at their performance in these tests when setting pupils to ensure they are stretched/supported with the learning.