

www.fulford.york.sch.uk/curriculum-information/mathematics/

The **Mathematics Department** at Fulford School is made up of enthusiastic mathematicians, eager to spread both their passion for and understanding of the discipline of Mathematics. We endeavour to develop pupils who are inquisitive and who accept and tackle the challenges put before them. We strive to establish the confidence and necessary mathematical skills to produce clear solutions to problems encountered both in the Mathematics classroom and also in real life.

Engaging and interactive lessons encourage students to discuss ideas and compare solutions. The department is well resourced with textbooks for all Key Stages as well as a range of activities such as loop cards, jigsaws and treasure hunts. We also encourage students to access online resources to further develop their understanding of mathematical concepts. Websites we encourage students to use are listed below and where passwords are required, these can be accessed from class teachers.

Through a carefully planned curriculum, with guidance and support, we hope that every student can find enjoyment on their way to the appropriate qualification for the next stage of their lives.

Key Stage 3

Over recent years we have worked closely with our feeder primary schools to support the transition process in Mathematics through meetings with staff and through running after-school enrichment workshops. In Year 7, students are grouped into sets based on their performance at Key Stage 2 and in Years 7 and 8 they have seven one hour long Mathematics lessons across a fortnight. The scheme of work is based upon the tiered MyMaths for KS3. All topics are broken down into units that each last approximately two and a half weeks and include a 30 minute test to reflect on students' understanding of the topic. Students receive mid-topic homeworks to help prepare for these tests and a post-test improvement homework which is to be completed on MyMaths.

Key Stage 4

At Key Stage 4 students follow the Edexcel course in GCSE Mathematics; all students now take the new, reformed GCSE in Mathematics and will be awarded a grade between 9 and 1 at the end of the course. Schemes of work, assessments and activities are designed to support students to prepare for the demands of the final examinations. This support includes topic tests, mid topic homeworks and end of topic feedback to further improve.

Students are placed into sets at the end of Y9 and in almost all cases will remain in these sets throughout KS4. These sets will be taught either a higher, intermediate or foundation scheme. The reason for the intermediate scheme is to ensure we do not limit any child to a foundation or a higher paper so far away from the exams.

The department has ensured that plenty of support material is available to students through the VLE. We pride ourselves on being available to students at all times: offer weekly after-school workshops throughout the year, group support, one-to-one peer tutoring through the Numeracy Leaders scheme and focused form time intervention.

Every student is issued with a green notebook in which they are expected to make notes on an ongoing basis to support their revision for the final exams.

Edexcel GCSE Mathematics Specification

Key Stage 5

Mathematics at Key Stage 5 is one of the most popular A level subjects with a large number of students choosing to study it. Students follow the Edexcel specification which has recently been reformed. Students are taught by two teachers who will teach them half of the Pure aspects of the course and then their own specialisation, either Statistics or Mechanics. Students are expected to reflective about the strengths and areas for improvement and should address these in addition to any homework set by teachers. Students study approximately 20 units per year and have a topic test to gauge their understanding at the end of each. Further feedback and work will be provided so students can improve after topic tests have taken place.

For those students considering a scientific or mathematical subject at university, it is strongly recommended that they also study Further Mathematics. This is an additional full A-level, covering many more areas of both pure and applied Mathematics. For some universities it is essential, while nearly all universities prefer or recommend it, with many making no secret that lower offers may be given to students with Further Mathematics alongside Mathematics on their application. Students study the MEI specification with Numerical Methods, Modelling with Algorithms and Extra Pure as the minor units.

Many sixth formers also volunteer to support lessons across other key stages as part of their enrichment activities and even have the opportunity to mentor students at key stage 4, providing a valuable extra resource. Not only does this consolidate and help their mathematical communication, but provides a variety of other skills essential for their futures.

Edexcel A level Mathematics and Further Mathematics Specification

https://www.ocr.org.uk/lmages/308768-specification-accredited-a-level-gce-further-mathematics-b-mei-h645.pdf

Extra-Curricular

The department has a range of extra-curricular activities on offer. Every year a large number of students across all years are given the opportunity to take part in the UKMT Maths Challenges and we also take part in the Team Challenge events. In six out of the last nine years our Junior team has succeeded in reaching the National Finals of this event in London which has given them the chance to compete against the best mathematicians in the country. In 2017 our Senior Team also qualified for the National Finals, representing the local region in London. Further Maths students in Y12 and Y13 also take part in the national Ritangle competition.

Over the last few years the department has managed to involve students in a variety of fundraising activities. These have included Mathematical Treasure hunts in support of the NSPCC Number Day and Sponsored Sums for Comic Relief which have in total raised over £20000 in the last six years.

Curriculum Staff

Teacher	Role
Mr C Ball	Curriculum Leader,
	Associate Assistant Head Teacher, KS5 coordinator
Mr J Calderwood	
Mr C Clark	D of E Coordinator
Mr R French	Anti-bullying lead
Mr P Gatenby	Head of House
Mr M Green	
Mr R Harris	Deputy Head Teacher
Miss H Hughes	Second in department, KS4 coordinator
Mr A Kel	
Ms P Kelly	KS3 coordinator
Mr S Lewis	Head Teacher
Mr A Rosie	Assistant Head Teacher
Ms S Sexton	

