

## **Maths Department Details**

# January 2018

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. Kinaesthetic activities such as loop cards, jigsaws and treasure hunts ensure students are active participants in their own learning. 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**

Group work and kinaesthetic activities are incorporated regularly into lessons in addition to a range of problem-solving activities. Resources and support material are available to teaching staff, students and parents through the VLE and online resources such as Mymaths. In Year 7, students are grouped into sets based on their Key Stage 2 results and have 7 one-hour long Mathematics lessons across a fortnight. Year 8 students have 7 hours per fortnight and 8 hours per fortnight in Year 9.

To further enrich their understanding of mathematics students are given an opportunity to apply their subject knowledge to practical contexts through Alternative Curriculum Days. During this time students are able to apply their mathematical skills to a range of contexts such as estimation and product design.

#### **Key Stage 4**

At Key Stage 4 students follow the reformed Edexcel GCSE in Mathematics. New schemes of work are in place and are reviewed regularly in order to ensure students are fully prepared for their exams in this reformed specification.

The department has ensured that a wide range of support material is available to students through the VLE. We pride ourselves on being available to students at all times and through strategic and year-long initiatives we are able to offer workshops, group support and even one-to-one peer tutoring through the Numeracy Leaders scheme thanks to volunteer sixth formers.

### Key Stage 5

Edexcel Mathematics and Further Mathematics courses are offered at Key Stage 5. AS Mathematics is currently the most popular subject in Fulford School's sixth form, with over 60 students enrolled on the course. The new course for year 12 follows the Pearson Edexcel books and all students take the AS at the end of year 12.

Currently, 20 students study Further Mathematics across Year 12 and 13, and a significant proportion of these are involved in STEP preparation sessions required for University applications. Year 12 study the compulsory core modules as well as Decision 1 and Decision 2.

# **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 National 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. This year, our senior team will also compete at national level for the first time.

Students also take part in the National Cipher Challenge competition each year with staff providing support for these at lunchtimes and after school.

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 £15000 in the last five years.

