**Mathematics Faculty**
**Sackville School**

Sackville is a STEM-supporting school and mathematics is one of the three lead faculties in this area, along with science and technology.

## Staff

The faculty team is strong, well qualified and experienced. The staffing consists of 7 full time mathematics teachers, 3 full time teachers teaching some mathematics, 4 part time maths teachers and 2 dedicated mathematics teaching assistants. All staff are trained mathematics teachers and are highly competent users and teachers of ICT within mathematics. They all use ICT for lesson delivery and everyday administration on a daily basis as well as delivering all lessons using interactive whiteboards. To aid lesson delivery we have also purchased a significant amount of software support for demonstration use as well as developing our own electronic resources.

The Head of Faculty runs the faculty with the aid of a Key Stage 3 co-ordinator, the director of numeracy (also Key Stage 4 co-ordinator) and a teacher in charge of intervention in mathematics.

Members of the department are expected, where possible, to teach the full age and ability range of the school, at least up to GCSE.

The faculty works very much as a team led by the Head of Faculty and all staff are expected to contribute to the development and maintenance of faculty aims.

## Accommodation

The faculty is accommodated in 10 mathematics classrooms plus a mathematics faculty computer room. Most of these rooms are in the mathematics block while the remaining three are in an adjacent block. It is normal for each full time teacher to teach most or all of their lessons in one room. Also in the main block there is a resource centre, faculty office and several storage rooms and cupboards. The computer suite contains modern PCs connected to the school's intranet and the internet. Each mathematics classroom has its own interactive whiteboard, projector and desktop computer. The faculty is the only one in the school to possess its own photocopier.

## Timetable

During the weekly timetable, Key Stage 3 students (years 7 and 8) receive 3 hours of lessons a week. Key Stage 4 students are given 4 hours a week in years 9 and 11 and 5 hours in year 10.
Students taking the single A level will receive 5 lessons a week in year 12 and 4 a week in year 13. Students taking the further mathematics A level will receive 9 lessons a week in both year 12 and year 13.

## Courses

### Key Stage 3 (years 7 and 8)

The mathematics teaching in Key Stage 3 is based on the new National Framework. Rich activities, group work and functional mathematics are important parts of our new approach.

When year 7 students first arrive at Sackville there are usually ten forms. From their Key Stage 2 results, we set them into an extension and two support group each band, the rest are in two mixed ability classes in each band. Movements between sets are considered once a term.

In year 7, students explore only Algebra and Number topics and solve problems involving combination of both topics.
Top sets are stretched with more advances material than is typically associated with such students of this age.

In year 8, students follow the same setting arrangements and introduced to Geometry and Statistics as well as more Algebra and Number topics.

Students in Key Stage 3 are supported in their learning by two mathematics specialist teaching assistants employed in the mathematics department. Students who are considered to be at risk of failing to get their Minimum Expected Grade (MEGs) at the end of year 8 are given personal tuition through in-class or withdrawal support.

### Key Stage 4 (years 9-11)

In Key Stage 4, students study the Pearson Edexcel GCSE with the majority of students taking the higher tier paper.
We have a distinct top set in each band in each year group which study the AQA Level 2 Certificate in Further Mathematics alongside the GCSE. We have two set 2 classes in each band (mixed ability) which study the higher tier course and then either two or three set 3 classes in each band (mixed ability)which study the foundation course.
Progress is monitored through regular testing through milestone tests in years 9 and 10 and mock examinations at the end of year 10 and twice in year 11.

Students study mathematics for 4 lessons a week in year 9 and year 11 and 5 lessons a week in year 10.

### Special Needs at Key Stages 3 and 4

Special Needs help is provided by Learning Support Assistants from the Special Needs (LINK) department. These support assistants work within the normal lessons rather than by extraction.

### Key Stage 5

Mathematics has been a popular Key Stage 5 choice in recent years and in the Sixth Form we offer both Single and Further Mathematics at A Level as well as GCSE retake and functional skills for students who have not achieved a grade 4 by the end of year 11.

Students taking Further Mathematics will study the Mathematics A level in year 12 and the Further Mathematics A level in year 13. The options studied in year 13 may vary year by year but it is envisaged that Further Statistics 1 and Further Mechanics 1 will be the predominant option choices.

**Examination results**

**GCSE**
In 2016 the Progress 8 for maths was +0.52 putting us nationally in the top 15% and in 2017 the Progress 8 for maths was +0.24 putting us nationally in the top 27%.

**A Level**

The results at A-Level Mathematics over the last 3 years are given below.

| | | Grade | A* | A | B | C | D | E | U | Average |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Points | 12 | 10 | 8 | 6 | 4 | 2 | 0 | points |
| | Entries | | | | | | | | | |
| Total | 120 | | 14 | 37 | 18 | 22 | 11 | 7 | 2 | 7.9 (Just below a grade B) |

During the same period the results at A-Level Further Mathematics have been.

| | | Grade | A* | A | B | C | D | E | U | Average |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Points | | 10 | 8 | 6 | 4 | 2 | 0 | points |
| | Entries | | | | | | | | | |
| Total | 19 | | 6 | 5 | 4 | 2 | 2 | 0 | 0 | 9.16(High B) |

Over the last two years and this year, Further Maths has become more popular and has attracted an average group size of over 7.

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