

Gosford Hill School

Mathematics Faculty

$$S = ic^3$$



The Curriculum

In Year 7, students are initially taught in mixed ability teaching groups. A variety of assessment information is used to place students in sets, including information from primary schools, class work and class tests. Part way through year 7, and in other year groups, students are taught in ability groups. In addition there are a number of opportunities for students to catch up with their peers in cases where their starting point is low, as well as opportunities to extend the more able, for example through the UKMT Maths Challenge competitions. At GCSE, the Faculty follows the new AQA 9-1 syllabus and currently uses AQA for Maths and Further Maths at A and AS level.



In recent years, there has been a shift in Maths education to make it more functional and based on problem solving. Students are expected to be flexible in their approach to problems and they are supported to generate their own examples and tackle problems set by their peers. Students are encouraged to use diagrams to make links between different aspects of Maths and to use a variety of different representations to deepen their understanding, for instance using area diagrams to represent algebraic expressions. Students receive effective feedback on their work which enables them to know exactly what they need to do to improve. This has shown to be effective in engaging students and helping them to become more independent.

A level Maths has been the most popular A Level choice by number of entries and results have been consistently high for many years.

Extra-Curricular Provision

The school currently runs a chess club and a Rubik's cube club, which operate at lunchtime and are open to everyone. In addition, there is a maths club aimed at the more able students in Years 7 and 8, supported by older students. The 'buddy maths' scheme, where older students support younger ones to build fluency in numeracy, operates during tutor time. This has been particularly successful.

Examination Results

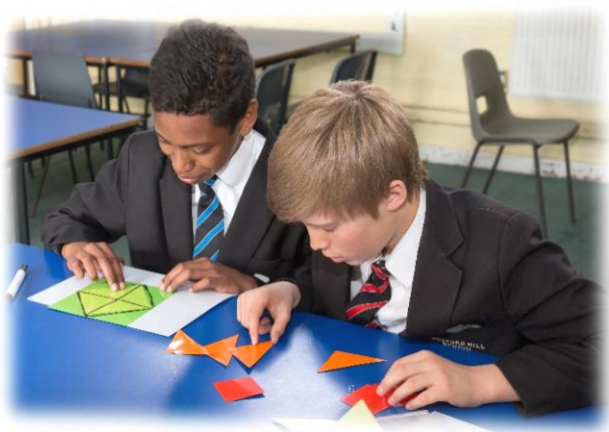
Examination Results 2016 in Maths			
GCSE	No. of Students	%A*/A	%A*-C
Maths (Edexcel)	152	14%	73%
A LEVEL (AQA)	No. of Students	%A*-B	%A*-E
AS level (year 12)	24	29%	46%
A2 Maths (year 12 Further maths students)	6	44%	100%
A2 Maths	18	72%	83%
A2 Further Maths	5	0%	80%



Staffing, Resources and Accommodation

The Maths Faculty consists of ten specialist teachers, and is supported by an HLTA who delivers some intervention programmes and by TAs in the classroom.

The department has eight specialist teaching rooms, and use of the Lecture Theatre. Each teacher has their own laptop. All rooms have a data projector and a smart board. Schemes of work and many resources are stored centrally on the shared area of the network for easy access for teachers.



As well as text books, teachers are encouraged to use a wide range of resources in planning their lessons, including dice, 2D and 3D shapes, cuisinaire rods, and tarsia puzzles/loop activities. Teachers are encouraged to plan collaboratively and share ideas and resources.

The faculty motto is **$S = ic^3$**

To be successful, students need to *identify* the mathematics required to solve problems in a culture of *challenge*, *concentration* and *creativity*.

Gosford Hill School operates a 'No Smoking Policy' for all new appointments.

September 2016