

MATHS AT STANBOROUGH

The Maths Team at Stanborough School strive to make the learning of maths enjoyable and accessible to all students. The Curriculum is built around developing students' ability to recall facts, implement step-by-step approaches when solving problems and the ability to reason and solve unfamiliar problems.

Our teaching puts immense emphasis on deepening students' understanding in order for them to become competent at applying relevant facts and procedures. In the classroom, all students are encouraged to ask questions and explore alternative methods. One of the key aspects of the Curriculum is to enable students to understand how different areas of maths are connected, along with making students aware of the applications of maths in the world around us. In lessons, maths teachers consistently encourage our students to take pride not only in their achievements, but also in their behaviour.

Along with supporting students in fulfilling their potential in the classroom, we have excellent provision for students to appreciate the beauty of maths and ignite students' passion to extend their learning outside the classroom through a variety of means, from maths challenges to webinars and lectures in Cambridge and London.

What is equally significant to our ethos is to equip students with the necessary skills to achieve the best possible result in the GCSE and A Level exams to facilitate further study in maths or related disciplines.

CURRICULUM KS3

Our KS3 curriculum builds on content learnt in KS2. A smooth transition and meaningful progression is enabled through schemes of work which are designed by carefully considering sequencing of topics and content. Students learn maths in ability based sets. Setting in year 7 is done using prior attainment, CATs and a base-line maths test. Based on specific needs and abilities, different classes will use different resources and strategies in order to ensure that every child is given the necessary tools to make progress. Since there is similarity in topics learnt across all sets, there will be greater flexibility in movement across sets.

We have subscribed to a number of effective online resources. These resources will support students to carry out independent study, practice and research in class using their computing device and also at home.

Students will write three key assessments each year. Following the key assessment, teachers will provide a comprehensive personalised report detailing students' performance. This report will also provide students with the support to make improvement in their weaker areas.

Whilst delivering the KS3 curriculum, one of the underlying objectives is to ensure that our students are 'GCSE ready'. To enable this, huge emphasis is given to develop 'problem solving' skills, including developing the ability to apply appropriate concepts when solving complex and unstructured problems.

CURRICULUM KS4

At Stanborough, we follow the Edexcel Exam Board for the GCSE in maths. The KS4/GCSE Curriculum will be introduced in year 10 and students will be placed either in a Higher or a Foundation GCSE class. A larger proportion of students will follow the Higher GCSE Curriculum. Similarity in topics learnt across all classes will enable effective movement across sets in KS4 as well.

In year 10, students will explore and extend learning done in KS3 as well as bridge any gaps from KS3. Programme of study in year 11 will focus on 'top end' GCSE topics. Consolidation of learning and provision of personalised learning goals through assessments will continue throughout KS4. Independent study, research and reinforcement of topics learnt in class will also continue through our subscribed online resources. Alongside delivery of the KS4 Curriculum, students are offered plenty of experience in solving exam style and past exam questions related to the GCSE assessment objectives. We may also offer an alternative qualification to either complement the GCSE course or to maximise their potential in a maths course at A Level.

Classwork in the Spring and Summer Term of year 11 is related to revision of key topics identified from a variety of sources to maximise students' chances of achieving the best possible grade in their GCSE. Students are given past exam papers to complete for homework and results from in-class assessments as well as mock exams are used by teachers to create personalised revision plans for our students in year 11. Examiners' reports from the Exam Board, which highlight common errors and misconceptions, also influence our schemes of work and lesson planning.

CURRICULUM KS5

At Stanborough, we don't ask whether you are going to study maths at sixth form, but rather "What maths are you going to study?" We have a range of options available to suit all attainment levels, interests and future plans.

For those who have achieved at least a standard pass (grade 4) at maths GCSE, we offer Core Maths as an enrichment option that can help students to apply the skills they have learnt at GCSE to practical contexts in real-life and in their other subjects. In particular, Core Maths supports the study of science, geography, business studies, psychology and economics.

For those achieving at least a grade 7 in their maths GCSE, A level maths is a popular subject choice. A Level Maths builds from GCSE level maths and introduces calculus and its applications, mechanics and advanced statistics. Studying maths at A level prepares students for further study and employment in a wide range of disciplines involving the use of maths.

For those who enjoy maths and want an extra challenge, we offer Further Maths at AS and A level. This is an excellent choice for those wishing to pursue a university degree or career in science, technology, engineering or finance. As well as learning new areas of pure maths students will study further applications of maths in mechanics and decision maths. AS and A Level Further Maths build on, and so are studied alongside, A Level Maths.

Stanborough's sixth form is very highly regarded across all subjects, and is especially noted for its maths provision.

RESOURCES AND FACILITIES

Maths students have access to subscribed online resources like mymaths.co.uk, vle.mathswatch.co.uk, collinsconnect.co.uk and integralmaths.org. Along with clear explanation of topics, these websites also contain tutorials which offer instant feedback. At KS3, students will also be able to access the Collins textbooks from home.

Lessons are delivered using a variety of resources, which are carefully chosen based on the topic, ability and learning styles. Some maths lessons will take place in a computer suite to provide an opportunity to students to carry out personalised learning as well as explore and research mathematical concepts.

EXTRA CURRICULAR ACTIVITIES

Students who show an aptitude for maths are entered in the United Kingdom Mathematics Trust Maths Challenges at the appropriate level each year. Top performers are awarded Bronze, Silver and Gold certificates and the highest scorers qualify for additional follow-on rounds. A number of students in each year group are selected to represent the school in further team maths competitions.

Trips are a regular occurrence in maths for students in all key stages. In addition to team competitions, students attend Maths Inspiration shows and other popular lectures. A weekly maths enrichment club for students of all ages includes extended projects and mathematical games as well as problems and puzzles.