## Mathematics



Mathematics at Northampton High is an exciting and relevant course, designed to help promote thinking and problem solving skills that students will find extremely useful in their chosen careers.

We begin our mathematical journey in the senior school by extending the pupils' knowledge and encourage them to ask "Why", to help them to understand the skills and concepts that we are teaching.

Our students have the opportunity to enter the National Mathematical Challenge competitions, as well as being part of a team in the National Challenges. Other competitions that our students take part in are the National Cypher Challenges and GDST Mathematics competition.

## Key Stage 3

We support Key Stage 3 students by placing them into ability groups in Year 7, and we continually monitor their progress. Our Key Stage 3 teaching is geared towards supporting success at GCSE, as well as helping pupils to develop a love of Mathematics.

In Year 7, we focus on extending the pupils' knowledge of number, algebra, shape space and measures, and we pair pupils who need extra support with 'Number Buddies' so that they can gain confidence by working with older students. One of our aims is that pupils will appreciate the awe and wonder of our subject, so throughout Key Stage 3 we encourage collaboration and challenge as well as espousing practical approaches to teaching.



## Key Stage 4

We start our IGCSE journey in Year 9. We follow the Edexcel IGCSE specification A and our students continue to learn through collaboration, practical work and discussion.

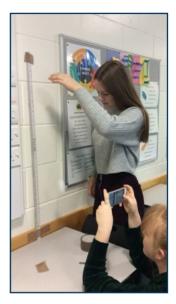
In Year 9, our pupils have the opportunity to go to Bletchley Park and participate in code breaking workshops and realise the

## Key Stage 5

We have a very high proportion of students choosing to study Mathematics and Further Mathematics at A Level. We follow the Edexcel A Level specification.

We offer Oxbridge specialist guidance and have proven success at STEP and other university entrance papers. A large number of our students study importance of Mathematics in the real world. We have proven success at IGCSE and our caring approach, extra support and individual guidance to identify individual students' requirements allows our students to achieve their potential in Mathematics.

Many then go on to study Mathematics at A Level and beyond.



mathematical subjects at university.

Students study Pure Mathematics, Mechanics and Statistics at A Level and they begin to see the connection between all aspects of Maths.

As in the lower years we are keen to use practical approaches to our teaching as this enhances the students' growing understanding of our subjects.

"Mathematics is intrinsically beautiful." - Naomi, Year 12



NORTHAMPTON

GDST