

## **Mathematics**

The Mathematics department is made up of ?? specialist teachers committed to ensuring students at Bow School fulfil their potential. There are interactive white boards in each teaching room that are used to deliver the curriculum to all ages and abilities. We have invested in specialist software to enhance our teaching and ensure all students enjoy learning maths.

### **Key Stage 3 Mathematics**

All students follow the National Framework for Mathematics, which involves: numbers; algebra; shape and space and data handling. They are encouraged to use the mathematical skills learned in each of these areas to solve problems and to investigate within Mathematics. In lessons pupils are given the opportunity to:

- Develop and use flexibly a range of methods of computation
- Develop mental arithmetic skills and those of estimation and approximation
- Use an electronic calculator accurately and efficiently
- Understand and use different systems of measure in practical situations
- Recognise patterns and structures in a variety of situations and form generalisations
- Use algebra to model real life situations and solve problems
- Explore the properties of shape and space in 2D and 3D through drawing, practical work and using a computer
- Collect, represent, analyse and interpret a wide range of data both manually and using ICT
- Recognise that data can be represented in a misleading way
- Study both practically and theoretically the principles that govern random events
- Extend and develop their ICT skills in both the use of generic software applications and specific mathematical modelling using dynamic graphing, geometry and statistical packages

### **GCSE Mathematics**

The GCSE Course develops and extends the skills and knowledge gained in Key Stage 3.

There are three tiers of entry: Foundation, Intermediate and Higher level. All students follow the AQA syllabus B Modular course.

The course is divided into 5 Modules:

Module 1 – Statistics 11% (Exam -March Year 10)

Module 2 – Statistics Coursework 10%

Module 3 – Number 19% (Exam –June –Year 10)

Module 4 – Investigative Coursework 10%

Module 5 – Algebra and Shape and Space – 50% (Exam –June Year 11)

Students must achieve a pass in each module in order to be awarded a final GCSE grade.