Maths

Key Stage 3 (years 7-8)

'*Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.*' (National Curriculum)

At Gordano, we have used National Curriculum aims (in conjunction with our local primary schools) to develop our own systems that allow for a mathematically strong journey for all students from Year 1 to Year 11. We have chosen to make Key Stage 3 mathematics a bridge between Key Stage 2 SATs and the GCSE curriculum. We aim to develop solid foundations in mathematical understanding to give all students the capacity to access and excel when studying the GCSE curriculum. We have made our own topic-based systems that cover the six mathematical strands of the National Curriculum (number, algebra, ratio & proportion, geometry, probability, statistics).

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 7	Number Rounding Algebra	Angles Polygons Multiples Factors	Prime Numbers Constructions Fractions	Sequences Percentages	Ratio Proportion	Data Averages
Year 8	Probability Algebra	Area Perimeter Volume Fractions Decimals	Percentages Measures Conversion	Equations Inequalities Transformations	Indices Standard Form	Graphs Pythagoras

Maths

Key Stage 4 (years 9-11)

All students will study Maths to GCSE. The Edexcel course is split into two entry tiers, Foundation and Higher. For students studying the Foundation tier course the highest grade they can achieve is a grade 5 and for students studying the Higher tier course the highest grade they can achieve is a grade 9. Students start building towards GCSE in Year 9, with decisions regarding the tier of entry for students to be later, usually in year 10, so that we have as much assessment data as possible to enable us to enter students for the tier that best suits their ability.

The course covers the 6 main mathematical strands; Number, Algebra, Ratio & Proportion, Geometry & Measure, Probability and Statistics. Our scheme of learning further splits this into 49 individual units which will be taught throughout the three years. The scheme of learning builds in regular interleaving of previous topics and a large focus is put on the practice of basic skills. Regular assessment is carried out throughout the course to inform teachers of how students are progressing. As students reach year 11 they will begin an exam past paper schedule for homework along with two full sets of mock exams in preparation for the real thing.

Key Stage 5 (years 12-13)

A Level Maths

Maths is, and has been for the last 10 years, the most popular A-Level in the country. At Gordano our A-level Maths cohort reflects this with consistently strong student numbers. The course is challenging and as such the entry requirement for A-Level Maths is a grade 7 at GCSE. The course is made up of two thirds Pure Maths content and one third Applied Maths (Statistics and Mechanics). The course is entirely examined with the students sitting 3 exams at the end of year 13.

A Level Further Maths

For the most able and enthusiastic Mathematicians the option exists to take A-Level Further Maths. These students are effectively studying two A-Levels in Maths, the single Maths A-Level as above and the Further Maths A-Level. As such they will have roughly double the amount of lessons and be in a separate class to the students taking single Maths A-Level. The content of Further Maths is more challenging and as such the entry criteria is a grade 8 at GCSE.

We also run a **Core Maths option (AQA Level 3 qualification).** This course aims to build on the knowledge, understanding and skills established in GCSE mathematics.