

Whole school curriculum principles

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| 1. The core, foundation knowledge in each discipline | | | | |
| 2. Opportunities for reading and development of Tier 2/3 vocabulary, writing styles and text types | | | | |
| 3 The numerical concepts used within each discipline. | 4 The practical and cognitive skills inherent to each discipline. | 5 The key timelines, theories and figures within each discipline | 6 Exposure to and consideration of diverse perspectives | 7 Knowledge of how each discipline has impact on the modern and future world. |
| 8. learning to be responsible for ourselves and our future | | 9. learning to be responsible for our community | | 10. Learning to consider our global and environmental responsibilities |

Key Stage 3 (Years 7-9)

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, our focus in Key Stage 3 is for students to go 'Deeper not Further' when learning their Mathematics. The priority isn't on how quickly we can push them through the curriculum, rather that students have a real understanding of the Mathematics they're being taught. In particular, there is a focus in Year 7 on asking students to explain the Mathematics they're learning. Students joining in or after September 2025 will follow the White Rose Maths Curriculum, which we have decided to implement alongside fellow LSP secondary academies Chew Valley and Backwell. Students will sit three formal assessments per year which help to inform our understanding of their progress.

| | Term 1 | Term 2 | Term 3 | Term 4 | Term 5 | Term 6 |
|--------|-----------------------------------|-----------------------------------|--------------------------|--|------------------------------------|---|
| Year 7 | Sequences Algebra Equations | Estimation Averages & Range | Graphing Data FDP | Negative Numbers Fractions of Amounts Perimeter & Area | Speed, Distance, Time Number | Operations on Fractions Angles & Polygons |
| Year 8 | Probability Algebra | Volume FDP | Measure & Conversions | Equations & Inequalities Transformations | Indices | Graphs Pythagoras |
| Year 9 | Number Algebra | Surds Equations 3D Shapes | Ratio & Proportion | Angles Multipliers Systematic Listing | Constructions Sequences | Quadratics Trigonometry |

Maths

Key Stage 4 (Years 10-11)

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 10, with decisions regarding the tier of entry for students to be later, so that we have as much assessment data as possible to enable us to enter students for the tier that's most appropriate for them. 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 32 individual units which will be taught throughout the two years. The scheme of learning builds in regular interleaving of previous topics and a large focus is put on fluency to support success. 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 sets of mock exams in preparation for the real thing

Key Stage 5 (Years 12-13)

A Level Maths remains 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. For the highest-attaining, most enthusiastic Mathematicians the option exists to take A-Level Further Maths. These students are studying two A-Levels in Maths, the single Maths A-Level as above and the Further Maths A-Level. As such they have approximately double the number of lessons and are 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 whilst also introducing statistical concepts like the Normal Distribution, and incorporating Maths for personal finance. Approximately 60% of Year 12 students study a Level 3 Maths qualification.