# Maths

| Weeks | Topic | Rationale | Assessment | Homework | Wider Curriculum (FBV, Employability, SMSC, Cultural Capital) - Across all terms |
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| **Term 1** | Unit 1 Sequences and series | Use algebraic methods to generalise more complex sequences | Assessment in the final week of term that will summatively assess all units covered in the term | Homeworks throughout the term will continually revisit the skills covered this term. | **Cultural** - Mathematics is the universal language of the world and we aim to develop a realisation that many topics we learn today have travelled across the world and are used internationally. Inevitably when introducing many topics, discussions will take place about their origins and the cultural influences that influenced the development of these topics. |
| | Unit 2 Proportional rates of change | Looking at compound interest and links to geometrical sequences | | | **Spiritual** - Developing a logical approach and the ability to recall and reason along with questioning the way in which the world works promotes the spiritual growth of our students. In Maths lessons, pupils are always encouraged to delve deeper into their understanding of Mathematics and how it relates and can be used to explain the world around them. |
| | Unit 3 Complex Equations | Solving equations | | | **Moral** - The moral development of pupils is evident in much of the curriculum where Maths is used in real life contexts and the students are able to apply the skills required to solve various problems and understand how decisions are made dependent upon the outcomes of the problem. Through these scenarios, students understand that certain choices may have different consequences and outcomes. We believe and hope to develop an awareness that Maths is not strictly limited to problems that result in right/wrong answers. |

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| **Term 2** | Unit 4 Loci | Solve problems that consider the locus points or regions of various situations | Assessment in the final week of term that will summatively assess all units covered in the term | Homeworks throughout the term will continually revisit the skills covered this term. | **Social** - Using and applying Maths involves being able to solve problems and being able to do this individually, as part of a team or pair when a task requires it. Students are encouraged to communicate mathematically when discussing, explaing and presenting ideas, through which they are able to develop their Mathematical reasoning skills. |
| | Units 5 Correlation and comparing data | Compare data and find relationships or links | | | |
| | Unit 6 Circles and Prisms | Further circle work and volume and surface area of more complex prisms | | | |
| **Term 3** | Unit 7 Place value and standard form | Use large and small numbers in a formal way | Assessment in the final week of term that will summatively assess all units covered in the term | Homeworks throughout the term will continually revisit the skills covered this term. | |
| | Unit 8 Factorisation and complex equations | Simplify equations and expressions | | | |
| | Unit 9 Applications of probability | Calculate probabilities of multiple events | | | |

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| **Term 4** | Unit 10 Enlargements and scale diagrams | Using maps and other scale diagrams. Enlargements including negative enlargements for pathway 3 | End of year assessment that covers all topics and skill covered in the year | Homeworks throughout the term will continually revisit the skills covered this term. | |
| | Unit 11 Algebra prep for GCSE | Expanding brackets and factorising | | | |
| | Revision | | | | |
| **GCSE Maths Course Starts** |
| **Term 5** | Unit 1 Working with Number | Principles of number including HCF, LCM and prime factors | Assessments at the end of each unit | Homeworks throughout the term will continually revisit the skills covered this term. | |
| | Unit 2 Algebraic Methods | Simplyfying expressions using algebraic concepts | | | |
| **Term 6** | Unit 3 Statistical representations | Visula representations of statistical data | Assessments at the end of each unit | Homeworks throughout the term will continually revisit the skills covered this term. | |