

Delivering exceptional learning experiences that enable all young people to thrive in a competitive world and lead successful and fulfilling lives.

THE HIGHEST STANDARDS

How does this year deliver your

curriculum intent?

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## Mathematics Year 12 2023-2024

| Half Term 1 | Week 0                       | Week 1                          | Week 2                       | Week 3                              | Week 4                                      | Week 5             | Week 6                   | Week 7  |              |
|-------------|------------------------------|---------------------------------|------------------------------|-------------------------------------|---|--------------------|--------------------------|---|--------------|
| Mech        |                              |                                 | P1: Algebraic Expressions    |                                     | P4: Graphs and Transformations              |                    | P5: Straight Line Graphs |   | Holiday      |
| Stats       |                              | Baseline Assessment             | P2: Quadratics               |                                     | P3: Equation                                |                    | and Inequalities         | P7: Algebraic Methods   |              |
| Half Term 2 | Week 8                       | Week 9- LC1                     | Week 10                      | Week 11                             | Week 12                                     | Week 13            | Week 14                  | Week 15   |              |
| Mech        | <u>P6: Circles</u>           |                                 | P9: Trigonometric Ratios     |                                     | P10: Trigonometric Identities and Equations |                    | P11: Vectors             |   | Holiday      |
| Stats       | P7: Algebraic Methods        | Methods P8: Binomial Expansions |                              | P12: Differentiation                |   |                    | P13: Integration         |   |              |
| Half Term 3 | Week 16                      | Week 17                         | Week 18                      | Week 19                             | Week 20- LC2                                |                    |                          |   |              |
| Mech        | P14                          | : Exponentials and Logarit      | <u>hms</u>                   | M8: Introduction to<br>Mechanics    | M9: Constant<br>Acceleration                | Holiday            |                          |   |              |
| Stats       | P13: Integration             | S1: Data                        | Collection                   | S2: Measures of Location and Spread |   |                    |                          |   |              |
| Half Term 4 | Week 21                      | Week 22                         | Week 23                      | Week 24                             | Week 25                                     | Week 26            |                          |   |              |
| Mech        | M9: Constant<br>Acceleration |                                 |                              |                                     | Revision                                    | Trial Examinations | Holiday                  |   |              |
| Stats       | S3: Representations of Data  |                                 | S4: Correlation              |                                     | Kevision                                    |                    |                          |   |              |
| Half Term 5 | Week 27                      | Week 28                         | Week 29                      | Week 30                             | Week 31- LC3                                | Week 32            |                          |   |              |
| Mech        | ств                          |                                 | M11: Variable Acceleration   |                                     | P2*: Functions and Graphs                   |                    | Holiday                  |   |              |
| Stats       |                              |                                 | S5: Probability              |                                     | S6: Statistical Distributions               |                    |                          |   |              |
| Half Term 6 | Week 33                      | Week 34                         | Week 35                      | Week 36                             | Week 37                                     | Week 38            | Week 39                  |   |              |
| Mech        | P5*: Radians                 |                                 | P6*: Trigonometric Functions |                                     | Revision                                    | Trial Examinations |                          |   |              |
| Stats       | S7: Hypothesis Testing       |                                 | P1*: Algebraic Methods       |                                     |   |                    |                          |   |              |
|             |                              | presented p                     | roblems in unfam             | niliar contexts and                 | work on their res                           | silience to comple | ete these probler        | and geometry. S<br>ns. They will be ab<br>atics in the real w | ole to adapt |

with the large data set. Links to geography and physics are explicit across the curriculum.

Ouring week 1, all students will complete a baseline assessment that will test their understanding of the powerful knowledge from GCSE

Mathematics. Students will be given a bespoke CTG task based on this assessment and will receive support for this during the after

school Achieve sessions in the first half term.

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## Further Mathematics Year 12 2023-2024

| Half Term 1 | Week 0                  | Week 1                                     | Week 2                    | Week 3                   | Week 4                     | Week 5                        | Week 6         | Week 7  |         |  |
|-------------|-------------------------|--|---------------------------|--------------------------|----------------------------|-------------------------------|----------------|---------|---------|--|
|             |                         | CP1/2: Complex Number and Arga<br>Diagrams |                           | CP3: Series CP4: Roots c |                            | of Polynomials                | CP6: Matrices  |         | Holiday |  |
| Half Term 2 | Week 8                  | Week 9- LC1                                | Week 10                   | Week 11                  | Week 12                    | Week 13                       | Week 14        | Week 15 |         |  |
|             | CP7: Linear To          | CP7: Linear Transformations                |                           | CP9: Vectors             |                            |                               | D1: Algorithms |         | Holiday |  |
| Half Term 3 | Week 16                 | Week 17                                    | Week 18                   | Week 19                  | Week 20- LC2               |                               |                |         |         |  |
|             | D2: Graphs and Networks |  | D3: Algorithms and Graphs |                          | D4: Route<br>Inspection    | Holiday                       |                |         |         |  |
|             |                         |  |                           |                          |                            |                               |                |         |         |  |
| Half Term 4 | Week 21                 | Week 22                                    | Week 23                   | Week 24                  | Week 25                    | Week 26                       |                |         |         |  |
|             | D5: Travelling Salesman |  | D6: Linear Programming    |                          | Revision                   | Trial Examinations            | Holiday        |         |         |  |
| Half Term 5 | Week 27                 | Week 28                                    | Week 29                   | Week 30                  | Week 31- LC3               | Week 32                       | Holiday        |         |         |  |
|             |                         | D7: Simple                                 | x Algorithm               | D8: Critical F           | <sup>p</sup> aths Analysis | CP5: Volumes of<br>Revolution |                |         |         |  |
|             |                         | D7. airipie                                | . Algumini                | Do. Cillicai i           |                            |                               |                |         |         |  |
| Half Term 6 | Week 33                 | Week 34                                    | Week 35                   | Week 36                  | Week 37                    | Week 38                       | Week 39        |         |         |  |
|             | CP1*: Complex Numbers   |  | CP2*: Series              |                          | Revision                   | Trial Examinations            |                |         |         |  |

How does this year deliver your curriculum intent?

Study within year 12 builds upon prior learning from year 10 and 11, especially regarding algebra and geometry. Students are presented problems in unfamiliar contexts and work on their resilience to complete these problems. They will be able to adapt methods shown to apply to all situations. Within statistics, students look at the relevance of mathematics in the real world- especially with the large data set. Links to geography and physics are explicit across the curriculum.

During week 1, all students will complete a baseline assessment that will test their understanding of the powerful knowledge from GCSE Mathematics. Students will be given a bespoke CTG task based on this assessment and will receive support for this during the after school Achieve sessions in the first half term.