Sir Thomas Wharton Academy

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

| THE HIGHEST STANDARDS | INVEST TO ACHIEVE | EVERYONE IS VALUED | NO EXCUSES | NEVER GIVE UP | CULTIVATE YOUR CHARACTER |
|---|---|---|---|---|---|
| Always set and deliver the highest standards: never settle for less. | Care about the now; create the very best for your future. | We are unique individuals working together to be the best. | Create solutions, not excuses. | Resilience is essential; self-belief drives improvement. | Qualifications open doors; your character gets you through them. |

# Mathematics Year 13 2023-2024

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|---|---|---|---|---|---|---|---|---|
| **Half Term 1** | Week 0 | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7- LC1 | Holiday |
| **Mech** | | P5*: Radians | | P6*: Trigonometric Functions | | P7*: Trigonometric Modelling | | | |
| **Stats** | | P4*: Binomial Expansions | | S1*: Regression, Correlation and Hypothesis Testing | | S2*: Conditional Probability | | P8*: Parametric Equations | |
| **Half Term 2** | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 | Week 14 | Week 15- LC2 | Holiday |
| **Mech** | M5*: Friction | | M4*: Moments | | Trial Examinations | P3*: Sequences and Series | | P10*: Numerical Methods | |
| **Stats** | P8*: Parametric Equations | P9*: Differentiation | | | | P9*: Differentiation | P11*: Integration | | |
| **Half Term 3** | Week 16 | Week 17 | Week 18 | Week 19 | Week 20 | Holiday | | | |
| **Mech** | P10*: Numerical Methods | P12*: Vectors | | M6*: Projectile Motion | | | | | |
| **Stats** | P11*: Integration | | | | | | | | |
| **Half Term 4** | Week 21 | Week 22 | Week 23 | Week 24 | Week 25 | Week 26 | Holiday | | |
| **Mech** | M7*: Application of Forces | | | | Trial Examinations | M8*: Further Kinematics | | | |
| **Stats** | S3*: Normal Distribution | | | | | Revision | | | |
| **Half Term 5** | Week 27 | Week 28- LC3 | Week 29 | Week 30 | Week 31 | Week 32 | Holiday | | |
| **Mech** | M8*: Further Kinematics | Revision | | Final Examinations | | | | | |
| **Stats** | Revision | | | | | | | | |
| **Half Term 6** | Week 33 | Week 34 | Week 35 | Week 36 | Week 37 | Week 38 | Week 39 | | |
| | Final Examinations | | | | | | | | |

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| How does this year deliver your curriculum intent? | Study within year 13 builds upon prior learning from year 12, 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.<br><br>By half term five, pupils will have revision lessons to recap content from Y12 and strengthen their understanding of the content from Y13. Throughout the year, students will be expected to complete one AS past paper per half fortnight and can receive support with completing this paper during the after school Achieve sessions. |

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# Further Mathematics Year 13 2023-2024

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|---|---|---|---|---|---|---|---|---|
| **Half Term 1** | Week 0 | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7- LC1 | Holiday |
| | | FM1: Momentum and Impulse | FM2: Work, Energy and Power | FM3: Elastic Strings and Springs | | FM4/5: Elastic Collisions in One/Two Dimensions | | | |
| **Half Term 2** | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 | Week 14 | Week 15- LC2 | Holiday |
| | P9*: Differentiation | | P11*: Integration | | Trial Examinations | P11*: Integration | | CP3*: Methods in Calculus | |
| **Half Term 3** | Week 16 | Week 17 | Week 18 | Week 19 | Week 20 | Holiday | | | |
| | CP3*: Methods in Calculus | CP4*: Volumes of Revolution | CP5*: Polar Coordinates | | CP6*: Hyperbolic Functions | | | | |
| **Half Term 4** | Week 21 | Week 22 | Week 23 | Week 24 | Week 25 | Week 26 | Holiday | | |
| | CP6*: Hyperbolic Functions | CP7*/8*: Differential Equations | | | Trial Examinations | Revision | | | |
| **Half Term 5** | Week 27 | Week 28- LC3 | Week 29 | Week 30 | Week 31 | Week 32 | Holiday | | |
| | Revision | | | Final Examinations | | | | | |
| **Half Term 6** | Week 33 | Week 34 | Week 35 | Week 36 | Week 37 | Week 38 | Week 39 | | |
| | Final Examinations | | | | | | | | |



| | |
|---|---|
| How does this year deliver your curriculum intent? | Study within year 13 builds upon prior learning from year 12, 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.<br><br>By half term five, pupils will have revision lessons to recap content from Y12 and strengthen their understanding of the content from Y13. Throughout the year, students will be expected to complete one AS past paper per half fortnight and can receive support with completing this paper during the after school Achieve sessions. |