

Curriculum Intent, Implementation and Impact

Maths Curriculum

Subject Rationale and Intent

The Mathematics curriculum is designed collaboratively with Trust colleagues to motivate students to be confident, competent, curious risk-takers in their learning. A broad offer runs across the key stages, including GCSE Foundation and Higher Mathematics, GCSE Statistics, GCSE Further Mathematics, Core Maths, A Level Mathematics, A Level Further Mathematics and, where appropriate, functional skills or entry-level courses.

STEM is embedded throughout: external speakers and workshops visit at least once per key stage, lessons make regular links between Pure and Applied Mathematics and STEM careers, and trips such as Bletchley Park and the F1 Williams team bring the subject to life. Setting supports different abilities, with higher-attaining students able to access GCSE Statistics and/or Further Mathematics, and additional support available for students who may need functional skills or entry-level provision instead of GCSE Mathematics.

Feedback is regular and high quality, and a Period 6 programme provides structured support, including a Sparx Maths club and dedicated intervention sessions for Key Stage 4 and Key Stage 5. Sparx Maths is used as a consistent homework platform with a target of over 80% completion. Pupil Premium funding supports students with the equipment they need, such as calculators, and trips and competitions are used to widen participation, including a specific focus on encouraging girls into Mathematics and Engineering.

The impact of this approach is improved engagement and enjoyment, leading to better outcomes. Students become more confident revising independently, supported by consistent routines established from Year 7, and are kept fully informed of their target grades through regular reporting.

YEAR 7	Curriculum Content	Assessment Criteria	Parent Support
Term 1	Number, algebra, geometry, statistics and ratio built progressively to prepare for GCSE. Setting is used to match teaching to ability. Sparx Maths is used for weekly independent-study homework.	Teacher-assessed through termly tests and Sparx Maths homework completion (target: 80%+), tracked against target grades. There is no external examination at Key Stage 3.	Sparx Maths (school homework platform) BBC Bitesize: Maths Corbettmaths (free topic-by-topic practice)
Term 2	Number, algebra, geometry, statistics and ratio built progressively to prepare for GCSE. Setting is used to match teaching to ability. Sparx Maths is used for weekly independent-study homework.	Teacher-assessed through termly tests and Sparx Maths homework completion (target: 80%+), tracked against target grades. There is no external examination at Key Stage 3.	Sparx Maths (school homework platform) BBC Bitesize: Maths Corbettmaths (free topic-by-topic practice)

YEAR 7	Curriculum Content	Assessment Criteria	Parent Support
Term 3	Number, algebra, geometry, statistics and ratio built progressively to prepare for GCSE. Setting is used to match teaching to ability. Sparx Maths is used for weekly independent-study homework.	Teacher-assessed through termly tests and Sparx Maths homework completion (target: 80%+), tracked against target grades. There is no external examination at Key Stage 3.	Sparx Maths (school homework platform) BBC Bitesize: Maths Corbettmaths (free topic-by-topic practice)

YEAR 8	Curriculum Content	Assessment Criteria	Parent Support
Term 1	Number, algebra, geometry, statistics and ratio built progressively to prepare for GCSE. Setting is used to match teaching to ability. Sparx Maths is used for weekly independent-study homework.	Teacher-assessed through termly tests and Sparx Maths homework completion (target: 80%+), tracked against target grades. There is no external examination at Key Stage 3.	Sparx Maths (school homework platform) BBC Bitesize: Maths Corbettmaths (free topic-by-topic practice)
Term 2	Number, algebra, geometry, statistics and ratio built progressively to prepare for GCSE. Setting is used to match teaching to ability. Sparx Maths is used for weekly independent-study homework.	Teacher-assessed through termly tests and Sparx Maths homework completion (target: 80%+), tracked against target grades. There is no external examination at Key Stage 3.	Sparx Maths (school homework platform) BBC Bitesize: Maths Corbettmaths (free topic-by-topic practice)
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Term 1	Number, algebra, geometry, statistics and ratio built progressively to prepare for GCSE. Setting is used to match teaching to ability. Sparx Maths is used for weekly independent-study homework.	Teacher-assessed through termly tests and Sparx Maths homework completion (target: 80%+), tracked against target grades. There is no external examination at Key Stage 3.	Sparx Maths (school homework platform) BBC Bitesize: Maths Corbettmaths (free topic-by-topic practice)
Term 2	Number, algebra, geometry, statistics and ratio built progressively to prepare for GCSE. Setting is used to match teaching to ability. Sparx Maths is used for weekly independent-study homework.	Teacher-assessed through termly tests and Sparx Maths homework completion (target: 80%+), tracked against target grades. There is no external examination at Key Stage 3.	Sparx Maths (school homework platform) BBC Bitesize: Maths Corbettmaths (free topic-by-topic practice)
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YEAR 10	Curriculum Content	Assessment Criteria	Parent Support
Term 1	GCSE Mathematics (Foundation or Higher tier), with GCSE Statistics and/or GCSE Further Mathematics available for higher-attaining students, and functional skills/entry-level provision where more appropriate.	Three exam papers (one non-calculator, two calculator), assessed against AO1 Use and apply standard techniques (50% Foundation / 40% Higher), AO2 Reason, interpret and communicate mathematically (25% Foundation / 30% Higher) and AO3 Solve problems within mathematics and other contexts (25% Foundation / 30% Higher). Foundation tier targets grades 1-5; Higher tier targets grades 4-9.	Sparx Maths (school homework platform) BBC Bitesize: Maths Corbettmaths (free topic-by-topic practice)
Term 2	GCSE Mathematics (Foundation or Higher tier), with GCSE Statistics and/or GCSE Further Mathematics available for higher-attaining students, and functional skills/entry-level provision where more appropriate.	Three exam papers (one non-calculator, two calculator), assessed against AO1 Use and apply standard techniques (50% Foundation / 40% Higher), AO2 Reason, interpret and communicate mathematically (25% Foundation / 30% Higher) and AO3 Solve problems within mathematics and other contexts (25% Foundation / 30% Higher). Foundation tier targets grades 1-5; Higher tier targets grades 4-9.	Sparx Maths (school homework platform) BBC Bitesize: Maths Corbettmaths (free topic-by-topic practice)
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Term 1	GCSE Mathematics (Foundation or Higher tier), with GCSE Statistics and/or GCSE Further Mathematics available for higher-attaining students, and functional skills/entry-level provision where more appropriate.	Three exam papers (one non-calculator, two calculator), assessed against AO1 Use and apply standard techniques (50% Foundation / 40% Higher), AO2 Reason, interpret and communicate mathematically (25% Foundation / 30% Higher) and AO3 Solve problems within mathematics and other contexts (25% Foundation / 30% Higher). Foundation tier targets grades 1-5; Higher tier targets grades 4-9.	Sparx Maths (school homework platform) BBC Bitesize: Maths Corbettmaths (free topic-by-topic practice)
Term 2	GCSE Mathematics (Foundation or Higher tier), with GCSE Statistics and/or GCSE Further Mathematics available for higher-attaining students, and functional skills/entry-level provision where more appropriate.	Three exam papers (one non-calculator, two calculator), assessed against AO1 Use and apply standard techniques (50% Foundation / 40% Higher), AO2 Reason, interpret and communicate mathematically (25% Foundation / 30% Higher) and AO3 Solve problems within mathematics and other contexts (25% Foundation / 30% Higher). Foundation tier targets grades 1-5; Higher tier targets grades 4-9.	Sparx Maths (school homework platform) BBC Bitesize: Maths Corbettmaths (free topic-by-topic practice)
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YEAR 12	Curriculum Content	Assessment Criteria	Parent Support
Term 1	A Level Mathematics, A Level Further Mathematics and Core Maths, extending GCSE content into more advanced algebra, calculus, statistics and mechanics.	Linear qualifications assessed through exams at the end of the course (end of Year 13 for A Level, end of Year 12 for Core Maths), testing standard techniques, mathematical reasoning and problem-solving at an appropriately higher level of demand.	Sparx Maths (school homework platform) BBC Bitesize: Maths Corbettmaths (free topic-by-topic practice)
Term 2	A Level Mathematics, A Level Further Mathematics and Core Maths, extending GCSE content into more advanced algebra, calculus, statistics and mechanics.	Linear qualifications assessed through exams at the end of the course (end of Year 13 for A Level, end of Year 12 for Core Maths), testing standard techniques, mathematical reasoning and problem-solving at an appropriately higher level of demand.	Sparx Maths (school homework platform) BBC Bitesize: Maths Corbettmaths (free topic-by-topic practice)
Term 3	A Level Mathematics, A Level Further Mathematics and Core Maths, extending GCSE content into more advanced algebra, calculus, statistics and mechanics.	Linear qualifications assessed through exams at the end of the course (end of Year 13 for A Level, end of Year 12 for Core Maths), testing standard techniques, mathematical reasoning and problem-solving at an appropriately higher level of demand.	Sparx Maths (school homework platform) BBC Bitesize: Maths Corbettmaths (free topic-by-topic practice)

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Term 1	A Level Mathematics, A Level Further Mathematics and Core Maths, extending GCSE content into more advanced algebra, calculus, statistics and mechanics.	Linear qualifications assessed through exams at the end of the course (end of Year 13 for A Level, end of Year 12 for Core Maths), testing standard techniques, mathematical reasoning and problem-solving at an appropriately higher level of demand.	Sparx Maths (school homework platform) BBC Bitesize: Maths Corbettmaths (free topic-by-topic practice)
Term 2	A Level Mathematics, A Level Further Mathematics and Core Maths, extending GCSE content into more advanced algebra, calculus, statistics and mechanics.	Linear qualifications assessed through exams at the end of the course (end of Year 13 for A Level, end of Year 12 for Core Maths), testing standard techniques, mathematical reasoning and problem-solving at an appropriately higher level of demand.	Sparx Maths (school homework platform) BBC Bitesize: Maths Corbettmaths (free topic-by-topic practice)
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