

Curriculum Intent Statement Department of Mathematics

We believe that students deserve a creative and ambitious mathematics curriculum, rich in skills and knowledge, which ignites curiosity and prepares them well for everyday life and future employment. Our mathematics curriculum will give students the opportunity to:

- become fluent in the fundamentals of mathematics, through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.
- can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.
- can communicate, justify, argue and prove using mathematical vocabulary.
- develop their character, including resilience, confidence and independence, so that they contribute positively to the life of the school, their local community and the wider environment.

Pedagogy	Enrichment	Other general principles
<p>Our pedagogy is underpinned by:</p> <ul style="list-style-type: none"> • a mastery approach to the teaching of mathematics for understanding • a spiral curriculum basing future teaching on the building blocks taught previously • concepts that are broken down into small connected and structured steps enabling application to range of contexts • variation to develop deep and holistic understanding • procedural fluency and repetition of key facts to free up working memory • manipulatives and multiple representations used to build and scaffold learning • marking and feedback that informs planning and addresses misconceptions promptly • questioning planned intelligently • interventions that are timely, planned and effective from Trust wide unified assessments • students who see error as a learning opportunity and are resilient in their learning 	<p>We will enrich our curriculum by:</p> <ul style="list-style-type: none"> • offering further opportunities for students to study mathematics whether with GCSE Statistics or Further Mathematics • establishing cross-curricular links especially through the learning of numerical skills and application in other areas • holding Trust-wide competitions and participating in national competitions to celebrate best work and extraordinary effort • using external resources to enhance and support independent learning and revision • experience of practical implementation of mathematics in everyday life for financial and numerical confidence and security • opportunities to promote STEM and further/higher education learning and careers 	<p>Our curriculum will enable students to:</p> <ul style="list-style-type: none"> • learn within a coherent and exciting framework which does not limit students ambitions • develop new skills through a variety of interesting contexts to foster enjoyment • develop a rich, deep and secure subject knowledge • understand what they are doing well and how they need to improve • explore the breadth and depth of the national curriculum • build on their understanding of the importance of British values, including democracy, the rule of law, individual liberty and tolerance and respect • improve their spiritual, social, moral and cultural understanding to develop confidence in their own financial and numerical understanding

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