



Maths Curriculum at Gaddesden Row School

Intent

At Gaddesden Row School, we aim to deliver a rich, inclusive and ambitious mathematics curriculum that equips all pupils with the knowledge, skills and confidence to succeed in their mathematical journey. Using the White Rose Maths scheme, our curriculum is designed to develop a deep and secure understanding of mathematical concepts through the principles of fluency, reasoning and problem-solving.

Mathematics is taught as a connected and coherent subject. Pupils build small steps of knowledge – factual, procedural and conceptual – to ensure they develop strong foundations and can apply their understanding flexibly. We place emphasis on mathematical talk, encouraging pupils to articulate their reasoning using precise vocabulary, complete sentences and agreed stem structures. This focus on oracy supports conceptual understanding and enables all pupils, including those with additional needs, to participate confidently in discussion.

We believe mathematics is essential for everyday life, logical thinking and future success. Our curriculum ensures that pupils:

- become fluent in the fundamentals of mathematics through regular and varied practice;
- develop the ability to reason mathematically using precise vocabulary and logical argument;
- apply their understanding to solve problems in a range of familiar and unfamiliar contexts.

From the Early Years through to Year 6, children experience an engaging curriculum built around the Concrete, Pictorial and Abstract (CPA) approach. This hands-on progression supports conceptual understanding, independence and enjoyment of the subject. Pupils are encouraged to see mathematics as a creative and connected discipline that supports learning across the curriculum and helps them make sense of the world around them.

Our teaching structure reflects the needs of our small school setting. Split class teaching is used up to Year 3, following single-year White Rose planning. Year 4 is taught as a standalone group to ensure focused progression, while Years 5 and 6 follow mixed-age White Rose planning to provide challenge and consolidation across upper Key Stage 2.

We are committed to ensuring that every child, regardless of background or ability, develops a positive attitude towards mathematics, confidence in their own ability and the resilience to tackle challenges with determination.

Implementation

Our mathematics curriculum is coherently sequenced and progressively structured to build on prior learning and deepen understanding across all strands: number, calculation, geometry, measure, statistics and algebra. The White Rose Maths scheme provides a clear and consistent progression through small, manageable steps that secure understanding before moving on.

Teaching and learning are underpinned by explicit modelling, consistent use of mathematical language and carefully planned opportunities for purposeful practice. Key features of our implementation include:

- Consistent use of the CPA approach to build secure conceptual understanding.
- Explicit teaching and revisiting of mathematical vocabulary to strengthen reasoning and explanation.
- Daily fluency sessions to reinforce automatic recall of number facts and calculation strategies.
- Use of high-quality representations such as bar models, number lines, place value charts and manipulatives.
- Adaptive teaching that ensures pupils with SEND and those from disadvantaged backgrounds receive targeted support through scaffolding, practical resources and pre-teaching of key concepts.
- Opportunities for deeper reasoning and open-ended problem-solving for higher-attaining pupils.
- Mixed-age planning in Years 5 and 6, ensuring full coverage and continuity across upper Key Stage 2.
- Regular retrieval practice and assessments that check what pupils have been taught and rehearsed.

Assessment is used diagnostically to identify gaps and inform responsive teaching. Teachers use live feedback, short retrieval tasks and questioning to ensure misconceptions are addressed promptly and understanding is continually reinforced.

Teachers are supported through comprehensive White Rose planning materials, subject leader guidance and ongoing professional development. The subject leader monitors progression and consistency through lesson visits, pupil discussions and work scrutiny, using these insights to inform staff training and the continual refinement of teaching practice.

Impact

Through our well-sequenced and carefully delivered mathematics curriculum, pupils at Gaddesden Row School develop the knowledge, skills and confidence they need to be successful mathematicians.

As a result of our approach, pupils:

- are engaged, motivated and enjoy exploring mathematical ideas;
- use appropriate mathematical vocabulary to explain their reasoning and justify solutions;
- show fluency in number and calculation alongside confidence in shape, space, measure and data;
- demonstrate independence, resilience and perseverance when tackling challenges;
- make strong, measurable progress through regular formative and summative assessment.

The curriculum ensures that pupils' understanding is deep and lasting. They retain key knowledge over time and can apply it flexibly in different contexts. Ongoing monitoring enables teachers to identify and address gaps swiftly so that every child progresses securely.

By the time pupils leave Gaddesden Row, they have a secure and connected understanding of mathematics, ready to build upon this foundation in Key Stage 3. They leave not only as competent mathematicians but as confident problem-solvers who can think logically, reason effectively and apply their learning to everyday life.