

The Vine Schools Maths Curriculum

Intent

At The Vine Schools, our intent is for all children to develop confidence and proficiency in mathematics, enabling them to think critically and apply their skills in a range of contexts throughout their lives. We strive to cultivate a love of mathematics, fostering an environment where children experience success and are motivated to persevere with challenging concepts.

We aim for all children to:

- Develop a deep and secure understanding of mathematical concepts.
- Approach problem-solving with resilience, selecting appropriate and effective methods independently.
- Engage confidently in reasoning activities, articulating their thought processes with clarity and precision.
- See mathematics as a creative and enjoyable subject, applicable to real-life scenarios.

We believe that a secure mathematical foundation is vital for every pupil, not only for success in education but also for navigating the challenges of an increasingly data-driven and analytical world.

Implementation

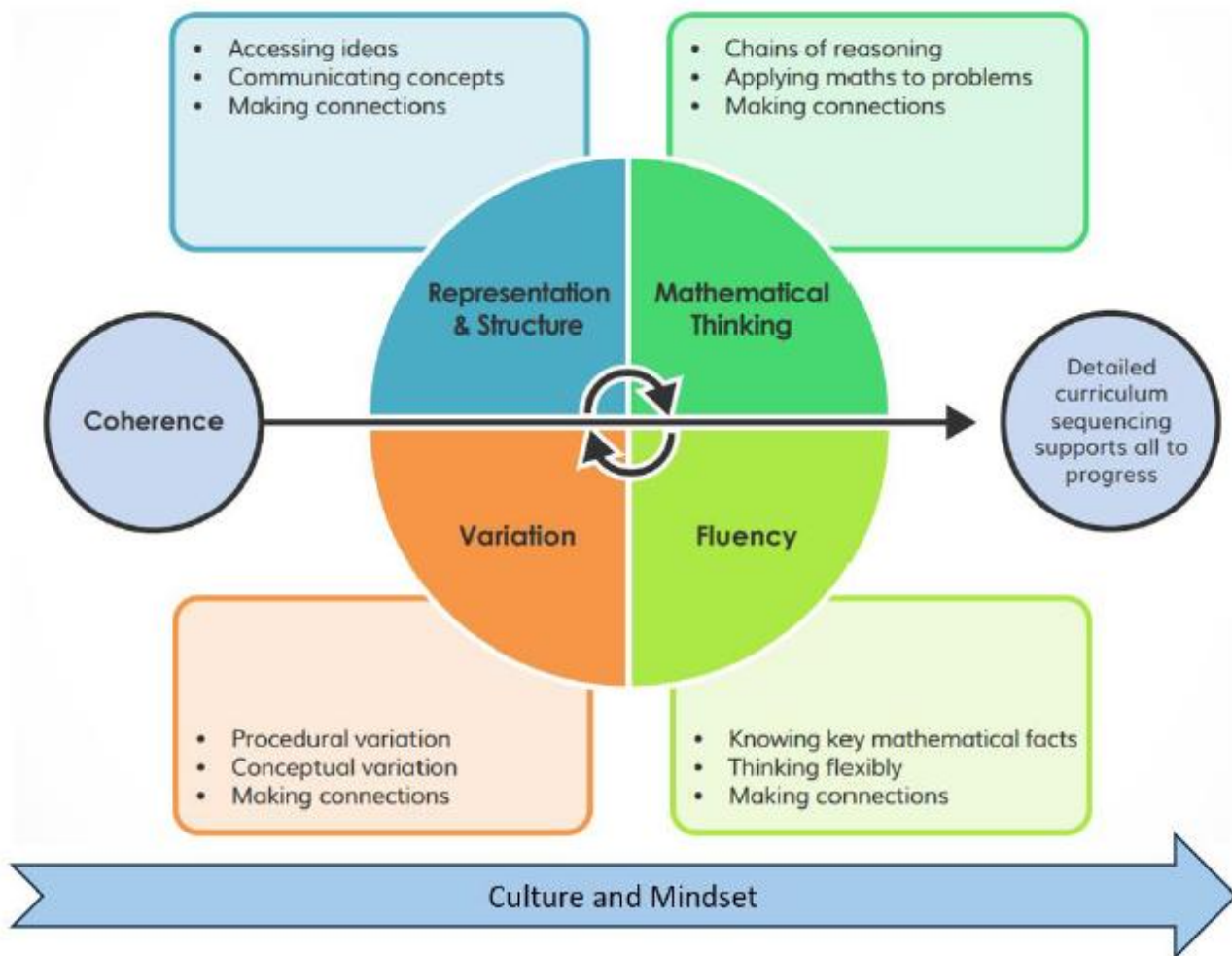
Our maths curriculum is designed to ensure high-quality teaching and learning across all year groups. It is underpinned by the **White Rose Maths** scheme, which provides a consistent and well-structured approach while allowing for adaptation to meet the needs of individual classes and pupils.

Teaching is sequenced across four distinct phases to ensure progression and continuity:

1. **EYFS:** Children explore mathematical concepts through hands-on activities and play, developing number sense, spatial awareness, and the ability to problem-solve in practical contexts.
2. **Year 1/2:** A focus on building fluency in key number and calculation skills, supported by concrete resources and visual representations. Pupils begin reasoning and problem-solving in manageable steps.
3. **Year 3/4:** Fluency is extended into more complex calculations and multi-step problems. Pupils develop flexibility and begin applying their skills to a range of contexts, solidifying their understanding through reasoning.
4. **Year 5/6:** Pupils focus on mastering mathematical concepts, with opportunities to apply their learning in real-world situations and through sophisticated reasoning and problem-solving tasks.

Our Approach to Teaching:

We follow the 'Five Big Ideas in Teaching for Mastery' which have been developed by the National Centre for Excellence in the Teaching of Mathematics (NCETM)



Adapted from 'Five Big Ideas in Teaching for Mastery' (NCETM)

Mathematical Vocabulary

We recognise the critical role of vocabulary in helping pupils articulate their mathematical reasoning and deepen their understanding of concepts. Key vocabulary is explicitly taught and reinforced throughout lessons. Pupils are encouraged to use mathematical terminology confidently and accurately in discussions, explanations, and written work.

Impact

By the time children leave The Vine Schools, they will have developed:

- Confidence and fluency in mathematics, enabling them to solve problems independently and with resilience.
- A deep understanding of mathematical concepts and the ability to apply their skills flexibly to unfamiliar situations.
- Strong reasoning skills, using precise mathematical vocabulary to explain their thinking and justify their solutions.
- A positive attitude towards mathematics, viewing it as an enjoyable and valuable subject.
- A strong foundation for further study, equipped to meet the demands of secondary education and the wider world.

Our curriculum ensures that children not only achieve academic success in mathematics but also gain the skills and attitudes needed to use mathematics confidently and effectively in their everyday lives.