

Statement of Intent for Mathematics

Intent

At St Botolph's, we aim to provide a high-quality mathematics education with a mastery approach so that all children:

- become fluent in the fundamentals of mathematics;
- reason mathematically;
- can solve problems by applying their mathematics.

(National Curriculum 2014)

These three aims of the National Curriculum are embedded within each Maths lesson. We want all children to enjoy mathematics and experience success in the subject whilst also develop their curiosity about the subject. Therefore, as outlined in our policy documentation, we aim to equip all pupils with the skills and confidence to solve a range of problems through fluency with numbers and mathematical reasoning.

It is vital for us that we foster a positive can-do attitude amongst all children and we actively promote the fact that we can all do maths! We believe all children can achieve in mathematics, and teach for secure and deep understanding of mathematical concepts through manageable small steps in learning. We use mistakes and misconceptions as an essential part of learning and provide challenge through rich and sophisticated problems.

We recognise that Mathematics is essential to everyday life. In line with our school's curriculum intent, our mathematics curriculum aims to equip all children in becoming successful adults. We are committed to ensuring all children recognise the importance of maths in the wider world and that they are also able to use their mathematical skills and knowledge confidently in their lives in a range of different contexts.

Implementation

To ensure consistency and progression for all children as they move through the school, we use the DfE approved scheme 'Maths No Problem' to support the delivery of mathematics across the school. We wholeheartedly believe that this method will provide a consistent approach to teaching maths across our school as it is underpinned by a methodical curriculum design that spirals and builds upon prior learning. Crucially, ideas are revisited at higher levels as the curriculum spirals through the years.

Rather than fidelity to the scheme, our teaching is committed to the principles of mastery. We use The Five Big Ideas of Mastery as our vehicle to promote a deep understanding for all our learners.

Key features of our implementation include:

- Teachers reinforce an expectation that all children are capable of achieving high standards in Mathematics.
- The large majority of children progress through the curriculum content at the same pace.
- Differentiation is achieved by emphasising deep knowledge and through individual support and intervention.
- Teaching is underpinned by methodical curriculum design and supported by carefully crafted lessons and resources to foster deep conceptual and procedural knowledge.
- Practice and consolidation play a central role. Carefully designed variation within this builds fluency and understanding of underlying mathematical concepts.
- Teachers use precise questioning in class to test conceptual and procedural knowledge and assess children regularly to identify those requiring intervention, so that all children keep up.

See our Policy for more details on how maths in planned and the key features of a lesson.

Impact

We believe that our approach to teaching maths will enhance understanding, enjoyment and achievement for every child. We want all our children to become confident learners and experience both success and challenge. It is hoped all children will feel empowered to aim high, challenge themselves and strive to be the best they can be. Through experiencing an appropriate

level of challenge, we want children to develop a positive attitude to challenging mathematical situations and therefore develop their resilience. They develop a can-do attitude and understand the value in learning from set-backs and mistakes.

Furthermore, we promote children's independence skills through the use of them selecting the appropriate methods and equipment. Children are exposed to a range of equipment throughout the whole school so equipment is valued as a tool to support learning and problem solving.

We have high expectations of the children to be able to verbalise their mathematical thinking. Through the use of mastery partners, we aim to promote the skills of collaboration and effective communication. The consistent teaching and reinforcement of key vocabulary by teachers and the use of stem sentences, give all children the tools to explain their learning. Consequently, by having a partner, children have the opportunity to explain their own mathematical thinking and apply reasoning therefore this will enhance their overall speaking and listening skills.

By the end of KS2 we aim for children to be fluent in the fundamentals of mathematics with a conceptual understanding and the ability to recall and apply knowledge rapidly and accurately. They should have the skills to solve problems by applying their mathematics to a variety of situations with increasing sophistication, including in unfamiliar contexts and to reallife scenarios. Therefore, they will be ready for the next stage in their learning.