

Intent

At Prior's Mill, we aim to ensure that all children:

- Become fluent in the fundamentals of Mathematics
- Are able to reason mathematically
- Can solve problems by applying their Mathematics

These skills are embedded within each Maths lesson and are developed consistently over time. Calculation methods, number bonds, patterns and facts such as times tables are a high priority. We are committed to ensuring that children can 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. At Prior's Mill, we want **all** children to enjoy Mathematics and to experience success in the subject, with the ability to reason mathematically.

Implementation

The content and principles underpinning the Mathematics curriculum at Prior's Mill reflect those found in high-performing education systems internationally, particularly those of east and south-east Asian countries such as Singapore, Japan, South Korea and China. These principles and features characterise this approach and convey how our curriculum is implemented:

- 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.

MATHS OVERVIEW

- 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.

To ensure whole consistency and progression, new concepts are shared within the context of an initial related problem, which children are able to discuss with partners. This initial problem-solving activity prompts discussion and reasoning. In KS1, these problems are almost always presented with objects (concrete manipulatives) for children to use. Concrete and pictorial methods are also used in KS2, especially when introducing a new concept. For example, the pictorial method of 'bar modelling' is used all the way through school to help children visualise problem solving. Teachers use careful questions to draw out children's discussions and their reasoning. The class teacher then leads children through strategies for solving the problem. Independent work provides the means for all children to develop their fluency further, before progressing to more complex related problems. Mathematical topics are taught in blocks, to enable the achievement of 'mastery' over time. Each lesson phase provides the means to achieve greater depth, with more able children being offered rich and sophisticated problems, as well as exploratory, investigative tasks, within the lesson as appropriate.

Impact

The school has a supportive ethos and our approaches support the children in developing their collaborative and independent skills, as well as empathy and the need to recognise the achievement of others. Children can underperform in Mathematics because they think they cannot do it or are not naturally good at it. Regular and ongoing assessment informs teaching, as well as intervention, to support and enable the success of each child. This ensures that we are not only able to maintain our high standards, but also improve these standards with attainment well above the national standard.