

Maths

Intent

It is our goal is to foster deep connections between mathematical concepts, encouraging children to explore and comprehend them thoroughly. For those who quickly grasp these concepts, we provide challenges that further enhance their understanding. Our approach involves equipping children with the skills to make sense of the world while empowering them to calculate, reason, and solve problems effectively in a range of contexts. We strive for our children to develop the ability to recognise and comprehend the relationships and patterns in numbers that exist in their everyday environment.

Implementation

At Westcott, our teachers conduct daily mathematics lessons that encompass maths basic skills. These lessons include exercises such as times table recall and counting, practicing fundamental skills, and engaging in activities that deepen their understanding of mathematical objectives through a mastery approach. To structure our curriculum, we use White Rose Maths, which provides a comprehensive framework. Our maths lessons follow the four-part 'Mastery Model,' which consists of Representation, Fluency, Reasoning, and Problem Solving.

To showcase their reasoning abilities, children are encouraged to respond to thought-provoking questions. Moreover, they are presented with opportunities to tackle intricate and challenging problems, applying their skills in unfamiliar contexts.

During maths lessons, children are provided with practical resources to represent concepts or practice newly taught skills. This hands-on approach allows for better comprehension and application.

For children who demonstrate fluency, we ensure they are appropriately challenged using probing reasoning questions and the opportunity to apply concepts to problems in different contexts. To reinforce key number facts and core concepts, children have regular opportunities to revisit and reinforce their knowledge through the Westcott Key Instant Recall Facts, which are designed progressively across each year group.

Impact

Our children develop fluency in the foundational principles of mathematics. They will engage in mathematical reasoning by exploring lines of enquiry, recognising patterns, and solving problems regularly. Over time, they will gain the ability to independently apply their understanding to a range of real-world problems in varied contexts.

Through our curriculum, children will acquire essential mathematical facts, as well as a deep understanding of key concepts and effective strategies. This knowledge and skill set will enable them to successfully apply mathematical principles across various areas of the curriculum.

At Westcott Primary, the children say that maths is... "working with numbers and solving real life problems"

Our Mathematicians

Our children are excited by maths. They take part in fun and engaging lessons which allow them to make connections between concepts and become proficient mathematicians. Our children are independent thinkers who like to be challenged, showing resilience. They know that mistakes are celebrated because it is how we learn.

The Sequence

To ensure sufficient time and in-depth exploration of each strand of mathematics, topics are organised into "blocks" distributed across the terms. This structure allows children to delve deeper into concepts. Additionally, concepts are consistently revisited throughout the year using our Fast Five approach. A clear progression of strands is maintained across each year group, ensuring a systematic development of mathematical skills and knowledge.

The Learning

On a daily basis, children are given the chance to engage in counting or reciting their times tables. This regular practice is part of our Fast Five approach, which aims to ensure a strong and comprehensive grasp of arithmetic concepts, ultimately facilitating accelerated progress. The learning process follows a mastery approach, where children start by using concrete manipulatives to represent concepts. From there, they progress through fluency, reasoning, and problem-solving activities to deepen their understanding even further. While all children are provided with opportunities to engage in reasoning, some may require additional scaffolding and support.

The Teaching

The 'Mastery Flow Model' that we use alongside White Rose Maths allows pupils to move through objectives at a pace which is bespoke to them. Pupils who grasp concepts rapidly are challenged through solving rich problems (which allow them to think deeper) before moving onto new content. Pupils who are not sufficiently fluent with a concept are shown different ways of representing mathematical ideas, using concrete manipulatives to support gaining a solid understanding.