Intent

At Burnt Tree, our intent for mathematics is to teach a rich, balanced and progressive curriculum. This allows our children to think mathematically, show a deeper understanding, enabling them to reason and problem solve. Our curriculum supports children to broaden their knowledge and understanding of how mathematics is used in the wider world whilst making connections between mathematics and everyday life. Teaching curriculum content in blocks allows children to explore skills and knowledge in depth. This allows them to gain a secure understanding of particular subject matter in line with age related expectations. A concrete, pictorial, abstract approach is used throughout the school, which provides children with a clear structure to deepen their understanding of mathematical concepts. Key knowledge and skills are also revisited regularly allowing repetition to embed learning and deepen understanding. We aim to ensure that mathematics is a high profile subject, which children view positively with a 'Can do' attitude. Therefore, leaving Burnt Tree Primary with a love for Maths and lifelong skills to support the next step in their Mathematical education.

Implementation

At Burnt Tree, children study mathematics daily following the White Rose Maths Scheme of Learning. WRM is a blocked scheme, which allows for depth and breadth of learning within each strand of mathematics.

As a school, we believe in the importance of following the concrete-pictorial-approach as a means to developing a solid understanding of mathematical concepts which can be applied in a variety of contexts through reasoning and problem solving challenges. Discussion is essential to learning and children are encouraged to discuss their thoughts, ideas and methods with a partner, group or the teacher. Children work both collaboratively and independently when solving problems which require them to persevere and develop resilience.

Resources and equipment are audited regularly so that children have materials of high quality and accuracy to support their learning. Our resources allow us to better use models and images to support learning in each area and enable the progression from concrete to pictorial to abstract.

Children receive a minimum of five maths lessons each week with additional sessions devoted to number proficiency and times tables. Times tables play an important part in our maths learning, with children developing their fluency in rapid recall of tables up to 12 x 12 by the end of year 4. In early years, mathematical skills are continually developed through both adult led and child initiated activities. Time is given to explore concepts, test ideas, develop understanding and practise taught skills through play. Maths can be found in all areas of our provision and children experience it in a purposeful and meaningful context within their play and daily routines. From Reception to Year six, we follow our calculation policy, which outlines the progression of strategies and methods to be taught. Correct mathematical vocabulary is used by all teachers and this is discussed with and explained to children who are then encouraged to use it

independently when talking about maths. Vocabulary is displayed clearly on working walls and is referred to in every lesson.

Daily assessment is incorporated throughout the lesson through live marking and verbal feedback to ensure misconceptions are identified and addressed promptly. Where children require additional support, 'scaffolds' are used to ensure that they have secured the small step before moving on. These 'scaffolds' may be in the form of returning to concrete resources or pictorial representations; on the spot interventions; same day interventions; pre-teaching; and small group work. For children who understand a concept quicker, challenges are used to deepen and challenge learners further within the curriculum area to avoid acceleration. Pre and post unit assessments are used where appropriate along with termly assessments which help teachers to gather an understanding of their pupil's existing and developing knowledge and skills.

All staff have access to on demand CPD and are encouraged to raise questions, seek support and request further training if needed in order to ensure everyone is confident in what they teach.

Impact

The impact of our mathematics curriculum is that children understand the relevance and importance of what they are learning in relation to real world concepts. Children know that maths is a vital life skill that they will rely on in many areas of their daily life. Children have a positive view of maths due to learning in an environment where maths is promoted as being an exciting and enjoyable subject in which they can investigate and ask questions; they know that it is reasonable to make mistakes because this can strengthen their learning through the journey to finding an answer. Children are confident to 'have a go' and choose the equipment they need to help them to learn along with the strategies they think are best suited to each problem. Our children have a good understanding of their strengths and areas for development in maths and what they need to do to improve. Our maths books evidence work of a high standard of which children clearly take pride; the components of the teaching sequences demonstrate good coverage of fluency, reasoning and problem solving. Our feedback and interventions support children to strive to be the best mathematicians they can be, ensuring a high proportion of children are on track or above. Our school standards are high, we moderate our books both internally and externally and ensure that children are achieving well. By the end of Year 6, transitioning to secondary school, we aspire that a Burnt Tree mathematician will have developed a bank of efficient and accurate skills that can be used to calculate effectively.