



Maths at West Green Primary

The National Curriculum 2014 Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics and a sense of enjoyment and curiosity about the subject.

At West Green we teach maths following the mathematics mastery programme. We selected this programme as it focuses on language development and aims to ensure all children access and develop mastery. Mastery is for all, and our aim is to ensure all children leave our school with a secure understanding of the four operations and can confidently use both written and mental calculation strategies in a range of contexts. We aim to ensure consistent strategies, models and images are used across the school to embed and deepen children's learning and understanding of mathematical concepts.

Maths Mastery is taught from Reception to Year 6. Maths Mastery aims to develop children's deep understanding of mathematics. They explore mathematical concepts in depth using objects, conversation and problem-solving to build confidence in their understanding of Maths which explicitly suits the needs of our intake of children. The 3 key elements of Maths Mastery sessions are objects and pictures, language development and problem-solving.

Our calculation policy sets out the progression of strategies and written methods which children will be taught as they develop in their understanding of the four operations. Strategies are set out in a Concrete, Pictorial, Abstract (CPA) approach to develop children's deep understanding and mastery of mathematical concepts. Children use concrete objects to help them make sense of the concept or problem; this could be anything from real or plastic fruit, to straws, counters or cubes. This is then developed through the use of images, models and children's own pictorial representations before moving on to the abstract mathematics. Children will travel along this continuum again and again, often revisiting previous stages when a concept is extended.

As children become increasingly independent, they will be able to and must be encouraged to select those strategies which are most efficient for the task. Children should be moved through the strategies at a pace appropriate to their age related expectations as defined in the EYFS and NC. Effective teaching of the strategies rely on increasing levels of number sense, fluency and ability to reason mathematically. Children must be supported to gain depth of understanding within the strategy through the CPA approach and not learn strategies as a procedure.