



Mathematics

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 Oak Hill children are introduced to the processes of calculation through practical, oral and mental activities. As children begin to understand the underlying ideas they develop ways of recording to support their thinking and calculation methods and learn to interpret and use the signs and symbols involved. Over time children learn how to use models and images, such as Numicon, bead strings and empty number lines to support their mental and informal written methods of calculation. As children's mental methods are strengthened and refined, so too are their informal written methods. These methods become more efficient and succinct and lead to efficient written methods that can be used more generally.

Implicit in this is our recognition of the importance of:

- children moving away from counting in 'ones' to counting in chunks
- children recognising the power of the ENL (empty number line) and not perceiving it as inferior to more traditional methods of recording
- wherever possible using contexts that are relevant, including cross curricular themes and stories.

Children in Key Stage 1 and 2 will have weekly mental maths activities in school based on the 'Rising Stars' tasks. At home we expect children to practise and learn number facts. We set targets each half term for children to work on so that they can develop the quick recall of number facts.

By the end of Year 4 we want our children to be equipped with mental and written methods that they understand and can use effectively. When faced with a calculation, children are able to decide which method is most appropriate and they have strategies to check its accuracy. At whatever stage in their learning, and whatever method is being used, it must still be underpinned by a secure and appropriate knowledge of number facts, along with those mental skills that are needed to carry out the process and judge if it was successful.