

Mathematics

A true understanding of mathematical concepts relies on the ability to use, apply and problem solve. To do this effectively it is essential that the children have confidence with number and number operations. At St Alphege we continue to teach practical maths in Key Stage 1, building on the exploratory approach throughout the Early Years Foundation Stage in the Nursery and reception year.

A daily structured lesson gives children the opportunity to develop mental maths skills and teaches concepts through exciting activities that use real apparatus known as 'manipulatives' to enable the children to explore and check their working out.

As children start year 1 lots of mathematics will be purely practical. We familiarise the children with addition and subtraction and secure their understanding with these particular number operations, also working on doubling and halving. We use very practical learning strategies to teach children money, time and measurement and provide a variety of hands on learning experiences. Photos, discussion and drawing will capture learning and demonstrate next steps.

As the children progress through Key Stage 1 we continue to support children's learning practically, but also through structured written means. A focus of the new National Curriculum is to enable children to explain the way they are thinking about maths. This is called mathematical reasoning, and is a focus throughout year 1 and 2.

We continue to teach a range of number concepts. We aim to increase the children's rapid recall of number facts to 100 with regular practice through games and activities taught across the whole curriculum.

The children also become more confident with more structured methods for the four operations (+, -, \times , \div) and learn how to use and apply these to real life situations. The children also learn about telling the time and using money which we encourage them to relate to their own experiences.

The children also gain a deeper understanding of shape and space, learning the correct terminology for the properties of 2D and 3D shapes, as well as using nets. They are taught directional and positional language, understanding angles and programming BeeBot toys. A large focus in year 2 mathematics is developing the children's ability to solve problems involving strategies and logic. The different vocabulary of maths is complex and so specific teaching, games, vocabulary displays are used to reinforce the children's understanding.

As a group of local schools, we have devised an agreed calculation policy that takes children, teachers and parents through a consistent method for working out problems using the four operations.