

Maths Intent, Implementation and Impact at Suffield Park Infant and Nursery School

Intent

At Suffield Park it is our aim to ensure that all children have the best grounding in mathematics. We strive for children to become fluent and confident in the fundamentals of mathematics for example, counting, place value and arithmetic. We want all children to develop their understanding of these key concepts by using this knowledge in different contexts and to problem solve. We encourage children to develop their mathematical vocabulary by reasoning mathematically. We encourage children to discuss links and patterns they spot, explain how they have solved problems and justify their answers. At Suffield Park we believe that maths is one of the foundations for understanding the world. With this in mind, we want our children to know the purpose behind their learning and to apply their knowledge to their everyday lives.

Implementation

Our maths curriculum is based around the concrete, pictorial, abstract (CPA) approach. Children will start with using concrete resources (multilink, bead strings, counters etc.) to manipulate when counting, solving calculations and problems etc. Once they are confident with this, we introduce drawing a representation for these objects (pictorial), before finally moving onto the abstract stage.

In EYFS the children are provided with a variety of inspiring maths opportunities both within the classroom and the outdoor environment. This will be through planned purposeful play using a mix of adult-led and child-initiated activities. When appropriate, maths is put into 'real life' contexts e.g. creating a shop in the role-play area so the children begin to see a purpose behind their learning.

In KS1 the children take part in daily maths sessions. These daily sessions incorporate a variety of techniques, including problem solving, and are planned to inspire, motivate and challenge all children. When appropriate, links are made to other areas of maths and the wider curriculum. Consolidation sessions are used to revisit previous learning and ensure that maths skills are embedded. During these sessions, the children not only have a chance to practise their maths skills, but it also enables them to embed their literacy skills for example reading word problems. Children in KS1 also have access to 'Maths Whizz' an online program tailored to their mathematical ability. This can be accessed at school and at home via a personalised log in. Teachers use 'Maths Whizz' to set topic focuses to give the children another opportunity to revisit knowledge and skills.

The importance of broadening the children's maths vocabulary runs throughout the school. We know that children need to be able to use this vocabulary confidently and fluently to understand the area they are learning, and to be able to make rich connections across other areas of the curriculum. This is supported by the use of a maths working wall in each classroom. Children continually utilise theses walls to support and extend their learning enabling the children to become independent learners. Problem solving lessons encourage children to use this mathematical vocabulary - discussing links and patterns they spot, and encourage the children to see a place for their learning in their everyday lives.

Impact:

We strive for:

- Engaged children who are all challenged during their maths sessions.
- Confident children who can all talk about their learning and the links between mathematical topics.
- All children to acquire the age appropriate related knowledge and skills linked to the maths curriculum.
- A higher than national level of children achieving GDS at the end KS1
- A richer vocabulary, which will enable the children to articulate their understanding of taught concepts and the world around them.
- An enjoyment towards maths with high aspirations, which will see them through to the next stage of their education and throughout their life.