



## **Maths**

### **Vision**

At Columbia, we want children to develop an appreciation of the beauty of mathematics as a way of thinking about the world. We aim to help children develop a curiosity about the ways number, shape and space work so they enjoy reasoning about the structures, patterns and relationships they observe. We want them to become enthusiastic investigators who can raise questions about mathematical ideas and persevere to solve maths problems, taking risks and learning from mistakes.

We also want children to understand the importance of mathematics in everyday life and know that it is critical in subjects such as science, technology, and computing.

### **Knowledge and Skills Progression**

We know that in order to do all this, children must have good basic knowledge and skills - a strong sense of number and fluency in calculation skills. In Reception and Key Stage 1, the children begin this journey by developing their number sense through the Mastering Number programme. This programme develops subitising and an understanding of cardinality, ordinality, and composition. It strengthens children's ability to compare numbers and understand how equations work. It develops their recall of number facts. Throughout the programme, there is a strong emphasis on developing mathematical language so that the children are able to describe and explain their thinking.

The Mastering Number programme leads the maths provision in the Early Years. In Key Stage 1, there is a 15 minute session each day.

Across the school, daily maths lessons are based on White Rose Maths Schemes of work. Teachers also pay attention to the core concepts outlined in the DfE's Ready to Progress Criteria in their planning. In the Early Years, teachers use White Rose to enrich the teaching of number, particularly in the continuous provision. It also provides a framework for the teaching of shape and space.

White Rose schemes support a mastery approach to the teaching and learning of maths. The schemes have number at their heart, promote depth before breadth and develop fluency, reasoning and problem solving. Children build competence in new concepts by following the Concrete, Pictorial, Abstract (CPA) approach. Regular assessment of the children's attainment and progress through the schemes of work help teachers adapt their teaching to meet the needs of all children. SEND children are supported through differentiated activities.

Children across the school are supported in their development of times tables through using Times Table Rock Stars and other number apps that are easily accessed at home.