



Maths at Summerfields



How we plan learning in mathematics.

Early Years Foundation Stage

In EYFS maths is planned with reference to Number Sense and NCETM EYFS Progression Chart.



Number Sense happens daily and teachers use the animations with the whole class to build a deep understanding of quantity and numbers to 10. The concepts covered in the Early Years Number Sense Programme are mapped to the 2021 statutory framework for Early Years.

NCETM



There are six key areas of early mathematics learning, which collectively provide a platform for everything children will encounter as they progress through their maths learning at primary school, and beyond.



Cardinality and Counting

Understanding that the cardinal value of a number refers to the quantity, or 'howmanyness' of things it represents



Comparison

Understanding that comparing numbers involves knowing which numbers are worth more or less than each other



Composition

Understanding that one number can be made up from (composed from) two or more smaller numbers



Pattern

Looking for and finding patterns helps children notice and understand mathematical relationships



Shape and Space

Understanding what happens when shapes move, or combine with other shapes, helps develop wider mathematical thinking



Measures

Comparing different aspects such as length, weight and volume, as a preliminary to using units to compare later

EYFS maths
NCETM planning

KS1 and 2

Our curriculum is led by the 2014 National Curriculum; the aims are to ensure all children:

- become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and are able to recall and apply their knowledge rapidly and accurately to problems
- reason mathematically by following a line of enquiry, building relationships and developing an argument, justification or proof using mathematical language
- can solve problems by applying their mathematical knowledge to a variety of problems with increasing clarity, including breaking down problems into a series of simpler steps and persevering in seeking solutions

The National Curriculum forms the basis for our planning: setting out expectations in year groups. At Summerfields, we focus on teaching maths in line with the Hampshire Schemes of Learning. Medium term planning organises domains and objectives systematically term by term – these are broken down into small steps which support the teaching sequence. Unit plans provide further detail to support and guide planning and teachers shape and design the learning journey to best fit the needs of the children. Links are made across domains to ensure that:

- prior knowledge is secured
- new curriculum content and key skills are introduced
- knowledge and understanding on new curriculum content and key skills are developed and then embedded

Concrete, pictorial and abstract planning are part of our teaching strategies. Concepts are introduced with concrete resources for children to feel and manipulate. As their conceptual understanding develops, they move towards the pictorial and abstract stages. The teacher's role is to:

- demonstrate clear modelling – through worked examples or I do, you do, we do approach
- allow time for discussion and paired work – encouraging use of stem sentences and precise mathematical language
- provide support and challenge – ensuring tasks include progressive questioning and variation to develop mastery
- present challenge through precise questioning