



Mathematics Subject Statement

*This document supports the school vision
Caring For Others And Courageously Striving For
Excellence*

Intent

At Long Wittenham we believe that mathematics teaches children how to make sense of the world around them through developing their ability to calculate, reason and solve problems. It enables children to understand relationships and patterns in both number and space in their everyday lives. Through their growing knowledge and understanding, children learn to appreciate the contribution made by many cultures to the development and application of mathematics. We view mathematics as a creative and highly interconnected subject essential to everyday life, science, technology and engineering, and necessary for most forms of employment.

Through the teaching of mathematics, we aim:

- to promote enjoyment of learning through practical activity, exploration and discussion.
- to provide children with the ability to recall and apply knowledge rapidly and accurately to a range of mathematical problems and situations.
- to promote confidence and competence with numbers and the number system.
- to develop the ability to solve problems through decision-making and reasoning in a range of contexts.
- to develop a practical understanding of the ways in which information is gathered and presented.
- to explore features of shape and space, and develop measuring skills in a range of contexts.
- to understand the importance of mathematics in everyday life.

Implementation

Mathematics at Long Wittenham is taught in blocks throughout the year, so that children can achieve depth in their learning. The programmes of study for mathematics are set out weekly and teachers follow the small step sequence of planning from the White Rose primary schemes of learning. Lessons reinforce skills, challenge pupils' reasoning and develops their problem solving expertise. The lessons provide three stages of challenge to learning through an 'All, Most and Some' approach which develop varied fluency, reasoning and problem solving. Children consolidate the skills they are learning whilst developing their reasoning skills and are provided with further problem solving opportunities in which they are required to justify and explain their learning using appropriate mathematical language and terms. Through the use of concrete resources, the concepts of subitising and conservation of number are secured. The pupils' understanding is extended through relating the 'concrete' stage to the 'pictorial' step. Through using pictures and visual representations, the pupils develop a deep understanding of number and mathematical concepts. Relating this to numbers and mathematical operations involves the 'abstract' stage in which the concrete (practical resources) along with the pictorial representations relates to the numbers we see in calculations.

Impact

One of our principal aims is to develop children's knowledge, skills and understanding. During our daily lessons, we encourage children to ask as well as answer mathematical questions. They have the opportunity to use a wide range of resources, such as number lines, number squares, digit cards, place value counters, base ten, Numicon and small apparatus to support their work. Wherever possible, we encourage the children to apply their learning to everyday situations.