

Mathematics Subject Statement

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

Intent

Through a positive, caring environment, we aim to instill a love of mathematics and promote a 'can do' attitude to maths without a fear of making mistakes. Children will be given time, support and resources to develop a deep, sustained understanding in maths. Through an engaging, balanced, challenging mathematics curriculum and high-quality teaching we aspire to produce individuals who are numerate, independent, curious, enquiring, and confident.

We aim that all pupils:

 \cdot Become fluent in the fundamentals of mathematics so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

 \cdot Can solve problems by applying their mathematics to a variety of problems with increasing sophistication, including in unfamiliar contexts and to model real life scenarios

 \cdot Can reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language

Implementation

We deliver the national curriculum through the White Rose curriculum, adapted to meet the needs of our children, drawing on additional resources from NCETM. Staff are continuously improving their practice through participation in the NCETM teaching for mastery programme and bespoke professional development.

Most of the time, the whole class is taught maths together, so that every child can master the key concept, whilst some will work on tasks that deepen their understanding. As our classes are mixed age, some elements of the curriculum may be taught to a certain set of children, however this is based on conceptual understanding rather than which year group they belong to.

Sufficient time is spent on key concepts to ensure learning is well developed and deeply embedded before moving on. Key concepts are revisited to aid retention and understanding. Depth of understanding and readiness for the next stage (whether it is the next lesson, unit of work, year or key stage) is prioritised, alongside high expectations of every child.

Precise mathematical language, often couched in stem sentences, is used by teachers and children so that mathematical ideas are conveyed with clarity and precision. Children are given opportunities to talk about maths and to explain their mathematical thinking.

Representations and concrete manipulatives are used to support conceptual understanding. Children are given problem solving and reasoning opportunities to enable them to apply their knowledge in new and unfamiliar contexts.

The school participates in the NCETM mastering number programme.

Impact

Regular reviews of teaching, learning and progress take place to continually develop teaching and learning in maths.

Our knowledge of children's learning is informed by:

- · Classroom observations
- · Learning walks
- · Book reviews
- · Formal summative assessments
- · Interviews with children
- \cdot Children's verbal and written responses in lessons