



Mathematics: Intent, Implementation and Impact

Our Intent

At St Cuthbert's Infant School and Pre-school, we believe that every child can succeed in mathematics. Our primary goal is to foster an early, lifelong love for maths by building a deep, secure, and resilient foundation in mathematical understanding. Because these early years are critical for cognitive development, our curriculum is intentionally designed to move children away from rote learning and toward true mathematical fluency, confidence, and reasoning.

We intend for our curriculum to:

- **Build Strong Number Sense:** Develop a deep conceptual understanding of numbers, their relationships, and how they work, ensuring no child is left behind.
- **Develop Mathematical Communicators:** Empower children to use accurate mathematical vocabulary and structured sentences from the very start of their educational journey.
- **Foster Problem Solvers:** Cultivate curiosity, critical thinking, and the confidence to explore mathematical concepts practically and creatively.
- **Ensure Equity and High Expectations:** Provide a curriculum that challenges all learners while providing the necessary scaffolding so that every child can master early mathematical concepts.

Our Implementation

We deliver our mathematical intent through a highly structured, research-backed framework tailored specifically to the needs of infant and pre-school learners. By combining curriculum frameworks with practical, hands-on learning, we make maths accessible, active, and engaging.

Core Curriculums and Frameworks

- **White Rose Maths:** We follow the White Rose Maths scheme of learning from Pre-School through to Year 1 and Year 2. This provides a progressive, step-by-step curriculum that ensures continuity, deepens understanding, and builds on prior learning.
- **NCETM Mastering Number:**
 - **In Reception:** This forms our full mathematics curriculum, seamlessly integrating deep number sense with essential spatial reasoning skills.
 - **In Year 1 and Year 2:** It is delivered as a dedicated maths fluency session 4 times a week, ensuring children develop automaticity and confidence with number facts.

Lesson Structure and Teaching Methodologies

Our daily mathematics lessons are designed to be dynamic, interactive, and responsive to the children's needs, utilising the following core strategies:

- We use a structured, scaffolded approach to learning through "I do" (teacher modelling), "We do" (children practising), and "You do" (independent work).
- Lessons begin with a quick retrieval practice consisting of four questions based on previously covered content to strengthen long-term memory.
- As an infant school, we know that young children learn best through doing, utilizing concrete manipulatives to bridge the gap between abstract concepts and real-world understanding.

Language, Communication, and Cognitive Journey

- Children are consistently guided through 'Think it', 'Build it', 'Draw it', and 'Explain it' to process and embed new concepts.
- We explicitly teach and insist upon the use of precise mathematical vocabulary and structured STEM sentences to help children articulate their mathematical reasoning clearly.

Our Impact

Our intent and implementation aspire to create children who are/have:

- **Fluent and Confident Learners:** Through the combination of Mastering Number and Flashback 4, our children develop rapid recall of core number bonds and approach tasks with confidence.
- **Articulate Mathematicians:** Because of our focus on STEM sentences and vocabulary, children can confidently explain why an answer is correct and describe the patterns they see.
- **Deep Conceptual Understanding:** By moving from 'Building It' to 'Drawing It', our children develop strong mental models of numbers that prepare them seamlessly for Key Stage 2.
- **Resilient Problem Solvers:** Our practical, scaffolded approach gives children the tools to view mistakes as a valuable part of the learning journey.