

Mathematics at Callowell Primary School

Belief + Hard Work + Understanding = Success

<u>Vision</u>

Mathematics is an important creative discipline that helps us to understand the world. We want all pupils at Callowell Primary School to experience the beauty, power and enjoyment of mathematics and develop a sense of curiosity about the subject. The pupils are at the heart of all we do, and our curriculum is built upon our STAR values and Golden rules. We ensure that through these values and rules we nurture, support, and inspire all our children so they can thrive in every way.

At Callowell we foster positive 'can do' attitudes, believe all children can achieve in mathematics, and teach for secure and deep understanding of mathematical concepts. We use mistakes and misconceptions as an essential part of learning and provide challenges through rich and sophisticated problems before acceleration through new content.

Curriculum Intent: Skills

We aim for all pupils to:

+ Become fluent in the fundamentals of mathematics (see Year by Year Curriculum Maps) so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

+ Solve problems by applying their mathematics to a variety of problems with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios.

+ Reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language.

+ Have an appreciation of number and number operations, which enables mental calculations and written procedures to be performed efficiently, fluently and accurately.

Curriculum Implementation

Maths Lessons: Teach up		MOT Sessions (Maths on Track)
M/T/W/T/F: (40 minutes)		M/T/W/T/F (20 minutes)
Learning Together	Support and Challenge	Deliberate Practice Sessions Arithmetic/Intervention/Practice

Mathematics Lessons

Each lesson focuses on a manageable step of new learning based on the NC statements.

Typical Lesson design:

- 1) Hook It: Introduction
- 2) Teach It: Live modelling of the new learning with explicit use of potential misunderstandings
- 3) Practise It: All children practise together Support & Challenge
- 4) Do It: Up to 5 examples 5 'What it is' or '3+2 'What it is/What it's also' Challenge 1: Procedural Fluency
- 5) Secure It: 1 or 2 Misunderstandings (True/false, Spot the mistake) Challenge 2: Conceptual Understanding
- 6) Deepen It: Apply understanding to solve new problems Challenge 3: Mathematical Thinking
- 7) Review It: Lesson Recap: Key Concept Statement and Key Vocabulary

MathsOnTrack (MOT) Meetings

Typical structure

- Day 1 : Arithmetic
- Day 2: Arithmetic
- Day 3: Deliberate Practice: Past and Present
- Day 4: Deliberate Practice: Past and Present
- Day 5: Fact Friday