

Cam Hopton CE Primary School

Life in all its fullness

Mathematics at Cam Hopton CE Primary

Intent

Mathematics is an important creative discipline that helps us to understand and change the World. We want all pupils to experience the beauty, power and enjoyment of mathematics and develop a sense of curiosity about the subject.

At Cam Hopton we acknowledge that mathematics is a life skill. It is an essential element of communication, widely used in society and everyday situations. Mathematics provides the opportunity to develop skills, practise perseverance and develop creative minds.

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 challenge through rich and sophisticated problems before acceleration through new content. So that children can aim to 'be the best they can be'.

At Cam Hopton we encourage children to approach mathematics with a 'Yes You Can' attitude.

The four 'Yes You Can' Pillars are:

1. Do not accept anyone saying 'It's OK I was never good at maths', 'Don't worry I was never good at Maths', 'I don't like Maths', or equivalent.
2. Stress to every pupil that they can learn and be successful in mathematics.
3. Making mistakes is a valuable and necessary part of learning.
4. Success comes from hard work and trying different approaches.

Our positive mindset mascot 'Kevin the Koala' helps to remind children to practise skills in resilience and growth. Teachers at Cam Hopton aim to provide a secure and positive classroom environment in which their mathematical thinking can flourish.

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 enable mental calculations and written procedures to be performed efficiently, fluently and accurately.

Implementation

Maths Lessons: Teach Up		Maths on Track Lessons: Keep Up
<i>'Learning Together'</i>	<i>'Support & Challenge'</i>	Deliberate Practice Sessions <i>Arithmetic/Intervention/Practice</i>

Learning takes place through whole class lessons which are carefully planned to help develop children's mathematical understanding. Key concepts of number and place value, calculating, fractions, geometry, statistics and space are broken into small steps to ensure all children are able to access the learning.

Children are challenged appropriately through rich, deep tasks which encourage them to think deeply, reason mathematically and apply their understanding in a range of contexts.

We aim to teach for deep and secure understanding for all pupils in our school, through a range of tasks which develop children's skills in line with the aims of the National Curriculum which are;

- Fluency
- Reasoning
- Problem Solving

Impact

Teachers use a range of resources when teaching and try where possible, to introduce new topics with appropriate concrete and visual resources. These enable children to gain a deep understanding of the mathematical concept so that the learning is sustainable over time. This allows children to build new learning upon prior knowledge whilst always striving to consolidate those key skills they have already learned.

In addition to daily Mathematics lessons, the children also receive regular 'number fluency' sessions. These sessions provide an opportunity for practising key number and arithmetic skills. The sessions are taught and focused, encouraging children to make connections, see patterns, build their arithmetical fluency and work together to explore mathematical ideas and conjectures.