

# Maths at Caythorpe



Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.

We aim to enthuse children in order to develop their thirst for mathematical knowledge. We do this by teaching mathematics through real life contexts and providing frequent opportunities to problem solve and reason across the curriculum.

## **Aims - The national curriculum for mathematics aims to ensure that all pupils:**

- become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects.

## **For further information please contact Mr Murphy, maths subject leader.**

As a school, we subscribe to [Times Table Rock Stars](#). We encourage children to play daily accessing using their username and password (available from your class teacher). Become a Rock God or Goddess, challenge your friends to a rock slam and watch out for tournaments set by your class teachers!

We believe every child can do maths. At Caythorpe we follow the White Rose scheme of work. The scheme follows a journey to mastery approach. It would take several years to master addition, so what we do is break the journey down into small steps, spending time carefully considering each.

Children are introduced to concepts firstly using concrete manipulative, through to pictorial representations before encountering abstract mathematics. Through intelligent practice and building up experience of different contexts, gradually we move towards mastery where pupils are fluent in the unfamiliar and can apply their skills in any new situation.

What to do if your child says "I hate Maths!" [A helpful video](#)