

Mathematics



Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to come 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 the sense of enjoyment and curiosity about the subject.

Mathematics National Curriculum 2014

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

The National Curriculum states 'The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace'. In order to support this we have adopted a mastery approach to the teaching of mathematics, so we have high expectations of all our pupils. We endeavour to make the mathematics curriculum accessible to all pupils; moving them through the programme of study at broadly the same pace, with opportunities to work on the objectives more deeply for those who rapidly grasp concepts before any acceleration through new content.

Children in Key Stage 1 and 2 will have daily mental maths activities in school as part of our Same Day Catch Up sessions. At home we expect children to practise and learn number facts and these are shared with parents on a half termly basis. By the end of Year 4 we want our children to be equipped with mental and written methods that they understand and can use effectively. When faced with a calculation, children are able to decide which method is most appropriate and they have strategies to check its accuracy. At whatever stage in their learning, and whatever method is being used, it must still be underpinned by a secure and appropriate knowledge of number facts, along with those mental skills that are needed to carry out the process and judge if it was successful.

