Maths at Furzeham Primary and Nursery school

Curriculum

Maths is taught everyday as a discrete subject as well as being incorporated in to foundation subjects, such as Science, History and PE where possible to develop cross curricular links. As a school we use White Rose Hub to support our planning and delivery of the various elements of mathematics using models, images, practical experiences and written methods as well as allowing opportunities to discuss and share thinking building on reasoning and problem solving skills.

EYFS

The Foundation stage strive to use concrete materials to help children's conceptual understanding through the use of daily focused 'number time' as well as mathematical opportunities throughout the continuous provision

Key Stage 1

The principal focus of mathematics teaching in Key Stage 1 is to ensure that pupils develop confidence and mental fluency with whole numbers, counting and place value. This should involve working with numerals, words and the four operations, with heavy emphasis on practical resources . They should also be introduced to the concept of times tables especially with 2s, 5s and 10s and develop quick recall rather than a 'counting on' concept.

Lower Key Stage 2

The principal focus of mathematics teaching in lower Key Stage 2 is to ensure that pupils become increasingly fluent with whole numbers and the four operations, including number facts and the concept of place value. This should ensure that pupils develop efficient written and mental methods and perform calculations accurately with increasingly large whole numbers.

Upper Key Stage 2

The principal focus of mathematics teaching in upper Key Stage 2 is to ensure that pupils extend their understanding of the number system and place value to include larger integers. This should develop the connections that pupils make between multiplication and division with fractions, decimals, percentages and ratio.

Rationale

Mathematics is essential to everyday life, critical to science, technology and engineering, and necessary in most forms of employment. We aim to develop lively, enquiring minds encouraging pupils to become self-motivated, confident and capable in order to solve problems that will become an integral part of their future. We look where possible to make links to other areas of the curriculum and the wider world. We aspire to use a mastery approach to our mathematics teaching, believing all children can succeed in mathematics and offering all children a chance to be exposed to objectives and expectations which will embed and progress their thinking.

Assessment

Teachers integrate the use of formative assessment strategies such as effective questioning, clear learning questions, the use of success criteria and effective feedback and response in their teaching. This informs next day plans and also highlights children who may need intervention work. Teachers use Target Tracker to track individual children's progress on Key Performance Indicators (KPIs) which have been agreed by the school and are in line with the End of Key Stage Frameworks tracking progression and development of skills and concepts through the year groups. This allows staff to create on going reports of children's progress and areas where there may be gaps.

Key Lines of enquiry

- Ensure reasoning and problem solving opportunities are planned and used within sessions.
- To continue to develop a 'talk culture' within maths to allow children to discuss and demonstrate their understanding