

Maths Vision

Intent

At St Mary and St Peter we want all of our children to be confident and creative mathematicians. We aim to equip all pupils with the skills and confidence to solve a range of problems through fluency with number and mathematical reasoning. Children are encouraged to see the mathematics that surrounds them every day through cross-curricular links and contextualised problems. All teaching follows a mastery approach enabling children to master a variety of mathematical concepts, build upon prior learning and develop a deep understanding. We are passionate about ensuring each of our children has a love of Maths, enabling them to become better problem solvers, communicator and decision makers later in life.

Implementation

We structure our learning using the 'White Rose' scheme, which form the basis of our long and medium term planning. We use this because it:

1. provides a coherent learning journey, covering all elements of the National Curriculum in achievable small steps of learning.
2. provides reference for pupils and teachers of what has been taught previously and what is on the horizon.
3. provides clarity and consistency of taught context across year groups.
4. ensures mathematical concepts are presented in a similar way across the school.
5. is aligned with high quality professional development.
6. provides resources which draw out the principles of teaching for mastery. This enables teachers to focus on teaching, rather than gathering resources.

We believe the Concrete, Pictorial, Abstract approach is crucial to building pupils' understanding of mathematical structures and teachers use a variety of manipulatives to support this throughout a unit of learning. A range of further resources have been shared with staff to allow teachers to plan lessons which match the needs of their pupils at their own discretion, including NRich and Testbase. We supplement our teaching with daily retrieval practice to ensure pupils can readily remember what they have learnt, including the regular teaching of number facts and times tables to aid fluency and accuracy.

Impact

Pupils at St Mary and St Peter speak highly of maths - they experience success in developing their understanding through carefully sequenced small steps, respond well to being challenged with different problems and enjoy developing vital life skills. Teachers use live marking to ensure all pupils are appropriately supported and challenged; they provide pupils who have a secure understanding with a range of complex, rich and sophisticated problems before accelerating through new content. Summative assessments are also used to inform interventions - teachers use PiXL and SATs assessments to identify gaps in pupils' knowledge and plan regular opportunities to reinforce and practise key skills through daily retrieval practice.

Cross Curricular links

- Science: gathering and presenting data in a variety of graphs and charts, analysing statistics, measuring time and temperature
- Geography: reading and analysing data presented in different ways, measuring and scales through map work
- History: Early number systems (e.g. Roman Numerals), dates, ordering events
- Computing: logical thinking, working systematically
- Art: shape (including reflection, translation, repeated patterns), measure
- Design and Technology: measure (length and weight), gathering and presenting data
- Computing: logical thinking, working systematically
- Reading: the ability to read and understand a problem, identifying the key information
- MFL: learning numbers in French