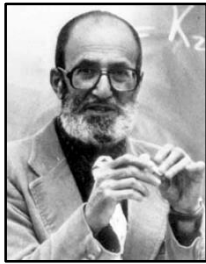


Intent, Implementation and Impact – Maths



“The only way to learn mathematics is to do mathematics.” – Paul Halmos

Mathematics Overview

Mathematics is important in everyday life. It is integral to all aspects of life and with this in mind at Lewknor Church of England Primary School we endeavour to ensure that children develop a positive and enthusiastic attitude towards mathematics that will stay with them beyond their time at our school. We follow a mastery approach to mathematics using resources from White Rose Maths Hub to support teachers in delivering this approach.

Intent

At Lewknor Church of England Primary School, we believe that mathematics is a key skill that helps us to make sense of the world around us. It enables children to understand and appreciate relationships and patterns in their everyday lives. Through their growing knowledge and understanding, children learn to understand and apply their knowledge to solve real-life problems. Our school’s Christian Vision (strong foundations) and core values (wisdom, friendship, integrity and resilience) are woven through mathematics to provide a wider context for learning through an interconnected narrative.

We also believe that mathematics equips children with a uniquely powerful set of tools to understand and change the world. These tools include logical reasoning, problem-solving skills and the ability to think in abstract ways.

Mathematics 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.

Implementation

As part of the mastery approach, a positive teacher mind-set and strong subject knowledge are key to student success in mathematics. The school is committed to providing a purposeful and empowering mathematics curriculum. It is not the case that some pupils can do mathematics and others cannot; no pupil should be left behind and the focus is keeping up over catching up. By making high expectations clear and emphasising the value of mathematics education, pupils are encouraged to build confidence, resilience and aspire to achieve. Abilities are neither fixed nor innate, but can be developed through practice, support, dedication and hard work. Natural talent is just a starting point and does not determine who has more or less potential to achieve. This way, pupils at the school are broadening their horizons with a mathematics curriculum that fully prepares learners for

their next steps in their school career and opens doors to understanding their place and the place of mathematics in the wider world, regardless of a child's background and ability.

Our mathematics curriculum is diligently sequenced to ensure that knowledge gained is cumulative; this aids progression as well as frequently providing pupils with the opportunity to draw on knowledge from previous year groups through our spaced retrieval strategies. Through this, our pupils understand the importance of the knowledge they gain through their mathematics lessons and how it can be transferred to all areas of the curriculum. Providing pupils with these opportunities to put into practice what they have learnt, we aim to ensure they are not only secondary school ready but can apply what they've learnt from primary school to their future career paths.

We use White Rose to support our mathematics curriculum. All teachers have access to the White Rose website where they can access planning and each year group is provided with maths books for each topic.

White Rose makes mastery practical and achievable by providing the structures, pathways, content, tools and support needed to make it happen in every classroom. To develop mastery in maths, children need to be enabled to acquire a deep understanding of maths concepts, structures and procedures, step-by-step. Complex mathematical concepts are built on simpler conceptual components and when children understand every step in the learning sequence, maths becomes transparent and makes logical sense. Interactive lessons establish deep understanding in small steps, as well as effortless fluency in key facts such as times tables and number bonds. The whole class works on the same content and no child is left behind.

Impact

By the time our mathematicians leave us in Year 6 we want them to have:

- An understanding of the important concepts and an ability to make connections within mathematics.
- A broad range of skills in using and applying mathematics.
- Fluent knowledge and recall of number facts and the number system.
- The ability to show initiative in solving problems in a wide range of contexts, including the new or unusual.
- The ability to think independently and to persevere when faced with challenges, showing a confidence of success.
- The ability to embrace the value of learning from mistakes and false starts.
- The ability to reason, generalise and make sense of solutions.
- Fluency in performing written and mental calculations and mathematical techniques.
- A wide range of mathematical vocabulary.
- A commitment to and passion for the subject.