

Colwich CE Primary School Curriculum Statement MATHEMATICS



God is love, so we: Learn to Love; Love to Learn; Learn for life

"Pure mathematics is, in its way, the poetry of logical ideas." Albert Einstein

Intent

At Colwich, our vision is that all children will acquire arithmetic and basic maths skills, to ensure key mathematical concepts are embedded and children can recall this information. We also intend for our children to make clear connections between mathematical ideas, to develop fluency, mathematical reasoning and to work systematically and accurately when solving increasingly sophisticated problems. As our pupils progress throughout the school, we intend for our pupils to have the ability to reason mathematically using correct vocabulary choices, and have a sense of enjoyment and curiosity about the subject.

At Colwich, we appreciate that mathematics is a universal language, essential to everyday life and most forms of employment. A high quality mathematics education provides a foundation for understanding the world and gives us important tools in life. Therefore, at Colwich we provide a rich and balanced curriculum, which is accessible to all. The National Curriculum places more emphasis on mathematical reasoning and problem solving, so we endeavour for our children to be able to apply their mathematical knowledge in maths lessons and in other subject areas. Our aim is to help learners develop confidence and gain a positive attitude towards maths, recognising the importance of maths in their own lives and to society.

A Colwich mathematician will develop:

- A lifelong love of learning the mathematics curriculum, linking new learning with our cultural and school values.
- Extensive knowledge of the number system and develop accuracy with calculations using all operations.
- Fluency of multiplication times tables and corresponding division facts.
- Knowledge of geometry, measurements and statistics in real life contexts.
- An excellent mind when applying their knowledge in problem solving situations.
- The motivation to persevere when faced with different challenges.

Implementation

The ways we will deliver our mathematics curriculum include:

- We use White Rose Maths schemes of learning supplemented by Power Maths, to support the teaching and learning of maths, ensuring full coverage of the curriculum (Years 1-6). EYFS use White Rose and Number Blocks.
- At the start of each new topic covered in maths lessons, key vocabulary is introduced and revisited regularly to develop language acquisition, embedding as the topic progresses. Vocabulary is also displayed on learning walls.
- We use 'Flashback 4' to develop our retrieval skills
- Daily maths lessons include a variety of activities where children work independently, in pairs or in small groups.
- The mastery approach incorporates using objects, pictures, words and numbers to help children explore and demonstrate mathematical ideas, enrich their learning experience and deepen their understanding at all levels.
- We integrate 'Active Maths' sessions within lessons when appropriate, where the maths learning is taken outside the room.
- We use a range of problem solving and reasoning resources as part of our maths lessons to challenge all children, and give them the opportunity to reason with their understanding, whilst giving them a sense of curiosity.
- We use White Rose Maths *written calculation policy* to ensure there is a consistent approach to teaching the four operations throughout the school, which includes concrete, pictorial and an abstract approach to learning (CPA).
- To ensure the progress made by individuals is age related to the National Curriculum expectations; staff have access to *progression of skills* grids for all areas of maths.
- Teachers use Key Performance Indicators (KPI's) to assess the level of understanding of all areas of maths for all children.

Impact

As a result of our Maths teaching at Colwich CE Primary School you will see:

- Children demonstrating a quick recall of mental maths facts, times tables and corresponding division facts.
- Children enjoying maths lessons, gaining the flexibility and fluidity to move between different contexts and representations of maths, and having the chance to develop their ability to recognise relationships and make connections in maths lessons.
- Children who are engaged when challenged, showing mastery of mathematical concepts or skills by calculating or representing a range of problems in multiple ways.
- Confident children who can all talk about maths and their learning with the correct vocabulary.
- There is clear progression of maths across the school.
- There is both formative and summative assessment in place that is used to support the planning and teaching of maths. This ensures that maths skills are secure and have been embedded before children move on to the next stage of their learning journey.