

English Martyrs' Catholic Voluntary Academy Maths Policy



Approved by: Gemma Ellis

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March 2027

"At English Martyrs' Catholic Voluntary Academy, we offer a broad-based curriculum which promotes the spiritual, moral, cultural and physical development of our pupils and prepares them for the opportunities, responsibilities and experiences of adult life."

Introduction to mathematics at English Martyrs'

A high-quality mathematics education provides a foundation for understanding the world, the ability to reason mathematically, and a sense of enjoyment and curiosity about the subject. This policy takes into account the new National Curriculum (2014) whilst working alongside our whole school curriculum aims seen below.







Rationale

We aim to develop lively, enquiring minds encouraging each individual pupil to become self-motivated, confident and capable in order develop a fluency and depth of understanding to solve problems. The delivery of mathematics at English Martyrs aims to ensure that all pupils:

- Secure an understanding of a range of concepts and their use and application within daily life.
- Become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time.
- Reason mathematically by following a line of enquiry, make generalisations and justify their ideas.
- Can solve problems by applying their mathematics to a variety of problems with increasing sophistication in a range of contexts
- Develop and use a full mathematical vocabulary

Fluency requires the quick and accurate mental recall of facts that pupils have learned up to that point; precision and confidence in using mathematical concepts, properties and symbols, and the competent and flexible selection and application of methods in different contexts.

Solving problems requires analysing information presented in different forms, recognising what is given in the information and what additional information is needed; identifying and conjecturing patterns, relationships, and generalisations; testing, inducing, deducing, and proving; and communicating ideas effectively.

Mathematical reasoning requires breaking down problems into a series of simpler problems or steps; making decisions about gathering, processing and calculating to acquire new information; and showing perseverance in finding solutions.

Pupils are taught to practise and then apply their mathematics to a range of problems. They are encouraged to make connections across mathematical procedures and concepts to ensure fluency, mathematical reasoning and competence in solving problems. They are also able to apply their mathematical knowledge across the curriculum. This is developed through specific planning for maths in the wider curriculum, planning for opportunities to rehearse and relate mathematical, knowledge skills and understanding to other subjects delivered through the school curriculum.







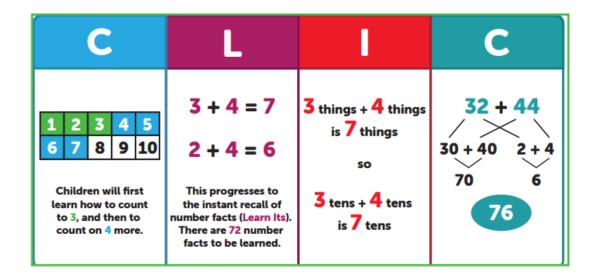
Our implementation of teaching and learning at English Martyrs'

Learning environment

All children in KS1 and KS2 participate in daily mathematics lessons. The children in EYFS work towards their Early Learning Goals. Our aim of developing inquisitive, confident and capable mathematicians is achieved through our implementations of the Big Maths CLIC and White Rose Maths schemes.

Big Maths

Big maths develops true mastery, fluency, reasoning, and problem solving in a fun and engaging way through Basic Skills. We are using their CLIC resources. CLIC session build up a child's knowledge so that they have the background skills in place to secure a new skill.



Children will have daily 20-minute CLIC sessions where they will work through a sequence of Counting, Learn Its, It's Nothing New and Calculation before moving on the wider maths element of their lesson. The fluency and developed security of Basic Skills through CLIC will allow pupils to be able to tackle more complex problems in wider areas of maths, without the increased cognitive load of recalling the fundamentals of maths such as times tables or mental addition of numbers. In turn, this allows the







working memory to be free to be used to reason and problem solve, building schemas to develop and deepen the children's understanding of mathematics.

CLIC stands for 'Counting', 'Learn Its', 'It's Nothing New' and 'Calculation':

Counting

Children will count forwards and backwards in steps depending on **their ability** e.g. in 1s, 2s, 3s, 6s or even 25s! When practising counting at home, make sure your child goes **forwards** and **backwards**. Don't always start at 0 – make sure they can count on from 75 to 106, for example.

Learn Its

'Learn Its' are addition facts and times tables facts. There are 72 Learns Its in total: 36 addition Learn Its and 36 multiplication Learn Its. These are facts that children need to learn off by heart! When asked 'What is 6+4?', they should give the answer as quickly (as quickly as telling you their name). As soon as they know $3 \times 5 = 15$ they also know $5 \times 3 = 15$ (this is known as a 'Switcher').

It's Nothing New This is the most **important** aspect of **CLIC**. It is the way children become **successful** and properly numerate. The idea that 5 things and 3 things are always 8 things is a fundamental concept. Children begin to learn the concept by counting **random things** (e.g. bananas, cats etc). Once children understand this concept, we change the 'thing' to other units (e.g. 'tens', so that 5 tens + 3 tens = 8 tens). It then becomes much easier to use standard measures (such as ml, m, cm, kg) whilst understanding the underlying number concepts.

Calculation

This aspect of **CLIC** is when we focus on **developing** the children's understanding of addition, subtraction, multiplication and division.

Big Maths maps out which steps children should do in a **clear order** and helps to identify where to go back to if a child needs extra **support**.

Big Maths provides a series of well-constructed, and sequenced small steps called progress drives that teachers thoughtfully collate together and teach for children to build on prior learning. The repetitive nature of the CLIC helps to embed knowledge into the long-term memory through frequent practice and retrieval.





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White Rose Maths

The second section of daily maths lessons at English Martyrs' follows the maths scheme from White Rose Education. Building on the Basic Skills taught through CLIC, children will follow a series of blocks throughout the year covering the full mathematic curriculum comprising of:

- Place Value
- Four operations
- Fractions, decimals and percentages
- Measurement (including money, time, area and perimeter, mass and capacity)
- Geometry (including shape, position and direction)
- Statistics
- Ratio and Proportion
- Algebra

White Rose resources are designed with five key principles of mathematics teaching in mind: concrete, pictorial, and abstract (CPA) methods, bar modelling, mathematical talk and questioning, reasoning and problem-solving, and thinking through variation.

A consistent CPA approach is embedded across all year groups to support deep conceptual understanding. Lessons follow a structured progression where children first explore concepts using concrete manipulatives (such as counters, base ten blocks, and number lines), before moving on to pictorial representations (diagrams and bar models) and, finally, applying their learning to abstract methods (numerical and algebraic representations). Frequent and varied use of physical manipulatives and visual models ensures all children can access and engage with mathematical concepts, regardless of their starting point.

During each lesson, children are encouraged to develop their knowledge, skills, and understanding of mathematics with high expectations for the use of mathematical language and vocabulary.

Please see our calculation policy for more information on the progression of the four operations.

SEND adaptations in maths

At English Martyrs, we are committed to ensuring that all children, including those with Special Educational Needs and Disabilities (SEND), have access to a high-quality maths curriculum that enables them to achieve their full potential.





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- Individualised Support: The needs of children with SEND are assessed and reviewed regularly to ensure appropriate support is in place. Adaptations are flexible and responsive, varying by topic in line with ongoing assessment and review cycles.
- **Inclusive Learning Environment**: Pupils with SEND work alongside their peers wherever possible, with additional scaffolds and support in place to help them achieve in line with their classmates and keep up with learning.
- **Targeted Interventions**: Additional adult support and interventions are provided when necessary to address specific learning needs, ensuring children receive the help they need to progress.
- Adapted Curriculum: Children working one or more years behind their peers follow an adapted curriculum tailored to their individual needs. This curriculum remains aligned with the White Rose progression scheme to ensure continuity and consistency in learning.

Our approach remains **flexible** and **adaptable**, ensuring that all children receive the right level of support to succeed in mathematics.



