



METROPOLITAN BOROUGH OF BURY
All Saints' Church of England Primary School

Mathematics Policy

Our Christian vision, deeply rooted in Christ's teaching, the Beatitudes, embraces and enriches all aspects of school life. Our nurturing ethos, committed to promoting a child-centered philosophy and development of the whole child, is firmly based on our core Christian values, as we all journey together in faith and love.

"Happy are we who journey together in faith and love"

OVERVIEW

The new National Curriculum states that:

"Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It 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."

Developing and increasing pupils' knowledge, skills and understanding of mathematics is core to our curriculum. The National Curriculum for mathematics aims to ensure that all pupils become fluent in the fundamentals of mathematics to solve problems, calculate and reason. This policy will underpin our work to ensure that all pupils are confident in each of the areas of mathematics including Number and Place Value; Addition and Subtraction; Multiplication and Division; Fractions; Measurement; Geometry and Statistics. It will ensure; high standards are achieved, that mathematics is taught well and that pupils make good progress at every stage.

INTENT

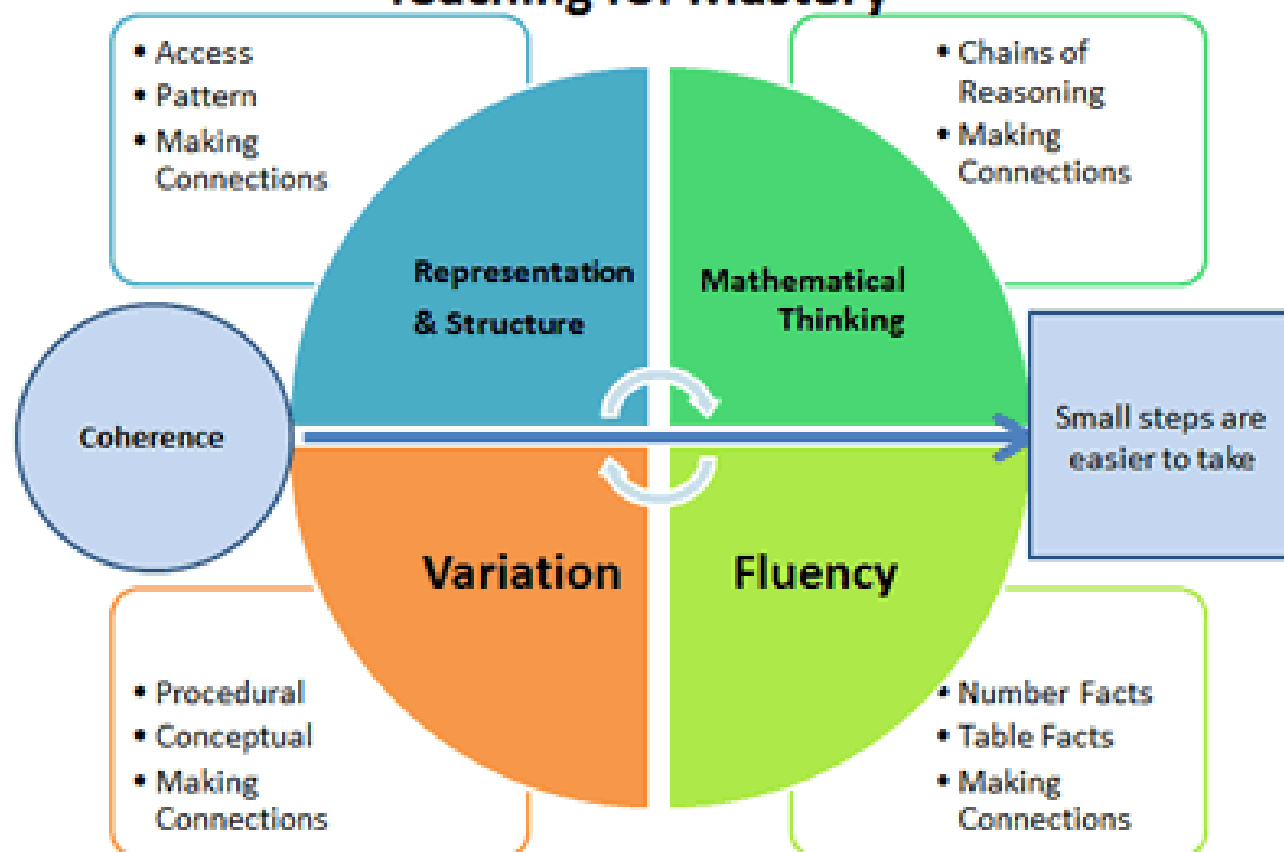
Mathematics teaches us how to make sense of the world around us through developing a child's ability to calculate, to reason and to solve problems. It enables children to understand and appreciate relationships and pattern in both number and space in their everyday lives. Mathematics is integral to all aspects of life and with this in mind we endeavour to ensure that children develop a healthy and enthusiastic attitude towards mathematics that will stay with them.

- To promote and develop children's enjoyment and enthusiasm for maths through exciting, practical, first-hand learning and opportunities to explore and investigate.
- To ensure that the statutory requirements of the National Curriculum for mathematics are taught well and applied across all subjects of the curriculum.
- To ensure that the school's schemes of work and guidelines for mathematics are taught, thoroughly, systematically and progressively to all pupils by all staff.
- To help pupils to become mathematicians by developing their problem solving and reasoning skills so that they can apply their independent thinking and questioning across the curriculum.
- To ensure that from the EYFS onwards, pupils are confident in their understanding and application of their basic skills in number and the number system and that they build upon their prior learning at every stage.
- To encourage children to use their increasing knowledge, skills and understanding of mathematics to investigate, ask questions and solve challenging problems.
- To develop pupils' confidence and skill in mental calculation methods to underpin their written methods as they explore the areas of mathematics and address increasingly complex problems.
- To bring mathematics to life and make it real, to ensure that children understand the importance of maths in their everyday day lives.
- To make certain that all children particularly those with special needs or disability are well supported and misconceptions are quickly dealt with so children can continue to progress.

IMPLEMENTATION

Through a mastery teaching approach the emphasis will be on children being fluent, being able to reason and explain their findings mathematically and solve problems. White Rose schemes of work, along with NCETM progression documents are used throughout school to plan and deliver challenging and engaging lessons along with our Visual Calculation Policy.

Teaching for Mastery



- Daily 'number sense' in reception and KS1 to promote fluency in mathematics
- Concrete, pictorial and abstract approach will be embedded in teaching across the key stages to ensure deep understanding and good progression of skills
- A range of teaching strategies, will be used to develop skills and knowledge for all learners, including those with SEND, and all pupils achieve high standards for their ability and make appropriate progress
- Children will be given opportunities to explore maths and present their findings visually as well as written form
- Children will be encouraged to; ask questions, solve problems, discover new information, apply and consolidate their knowledge, skills and understanding through first-hand experience, investigations and practical work.
- Teachers will make use of the immediate and wider environment to help pupils apply mathematics and see the relevance of mathematics to their own lives. They will set challenging work, tasks and problems to increase children's knowledge, skills and understanding and to extend their thinking.
- Teachers will assess children's work in mathematics through formative and summative judgements by; asking questions, observing learners during lessons, observing pupils solving practical problems and listening to pupils' discussions. Work will be marked regularly and frequently and pupils will be given appropriate, clear feedback which tells them how well they have done and what they need to do next to improve.

IMPACT

This policy will ensure that all pupils become fluent and competent in the fundamentals of mathematics, including the varied and regular practice of increasingly complex problems over time. They will be enabled to reason mathematically by following a line of enquiry, understanding relationships and generalisations, and developing an argument, justification or proof using mathematical language. Effective teaching will ensure that they can solve problems by applying their mathematics with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions. As pupils progress through the school they will become increasingly confident mathematicians.