St Matthew's Church of England Primary School

# **Mathematics Policy**

Policy written by Jack Rawlinson Governor link: Chair of Governors

Policy approved in December 2022 Policy to be reviewed in Autumn 2025





Whatever you do, do it with all your heart. Colossians 3:23

**Our vision** is to be a school where pupils have a positive approach to learning and where provision is consistently good or better. Our curriculum is relevant and creative and reflects our diversity. We aim for all pupils to leave St Matthew's well equipped for the future, demonstrating Christian values and showing self-confidence.

#### Introduction:

At St Matthew's Church of England School, we believe that mathematics is a tool for everyday life. It is a network of concepts and relationships which provides a way of viewing and making sense of the world. It is used to analyse and communicate information and ideas, and to tackle a range of practical tasks and real-life problems.

## Aims:

It is our aim to produce mathematicians who are confident, fluent, resilient, independent and accurate. We will do this by providing learning opportunities that are explorative, practical and discursive, linking mathematical concepts to everyday life in accordance with the National Curriculum.

#### Long Term Planning:

We use the National Curriculum for Mathematics 2014, Development Matters and Early Learning Goals for long term planning.

## **Medium Term Planning:**

All year groups use the White Rose Maths schemes of learning as medium term plans. These schemes of learning provide exemplification of mathematics objectives and are broken down into fluency, reasoning and problem solving. They support teaching for mastery and depth of understanding, as well as building reasoning and problem-solving elements into the curriculum. Other resources are available to teachers to supplement those provided in the schemes of work. We use Times Tables Rock Stars to support the children's learning of multiplication tables, and Numbots to aid in fluent recognition of numbers. We are also partaking in the NCETM Mastering Number project in Foundation Stage and Key Stage 1, and the NCETM Seeing Number project in Lower Key Stage 2. We are a member of the Angles Maths Hub.

## **Short Term Planning:**

The White Rose schemes of learning provide blocks of lessons that break the overall learning objectives into lesson-by-lesson objectives and outcomes. Questions and activities are provided, as are input resources. Teachers are encouraged to follow this scheme but have the liberty to extend these lessons as they see fit, depending on the needs of their children. White Rose provides a

recommended lesson-by-lesson overview for each year group, which makes clear which learning fulfills the ready-to-progress criteria found in DfE/NCETM Mathematics Guidance: Key Stages 1 and 2 (June 2020).

## Lessons:

Learning objectives and process/success criteria are clearly displayed and discussed in every lesson. We encourage lively and interactive teaching engaging all children in mathematical talk, a vital part of the learning process. Lessons should involve elements of: instruction; demonstration; explanation and illustration; questioning and discussion; consolidation; reflection; evaluation; and summarising.

Pupils will primarily use their books to record word work, but can also use IT and other methods where appropriate. They are encouraged to use mental strategies and jottings to solve problems, as well as being taught more formal written methods, as per our Addition and Subtraction Calculation, and Multiplication and Division Calculation Policies.

We do not set for mathematics. Each child has the opportunity to access the most appropriate level of learning for their ability and we recognise that children have strengths and weaknesses in different areas of the mathematics curriculum. Inter-child discussion within our classrooms is vital in developing the depth of understanding of mathematics and is something we encourage, with teachers and Teaching Assistants modelling and supporting good oracy skills.

We use Teaching Assistants to provide appropriate support to individuals or to groups of pupils. Teaching Assistants within the school are viewed as a vital asset and, as such, are appropriately involved in the delivery of the mathematics curriculum, providing valuable feedback to the class teacher which informs future planning.

# **Foundation Stage:**

Mathematics is a 'specific area' of teaching and learning in the Early Years Foundation Stage (EYFS) curriculum.

At the beginning of the Reception year pupils' mathematical skills are assessed using Baseline materials. Activities and opportunities are then planned to meet the children's needs, with progress closely monitored using the 'Development Matters' bands. At the end of the Reception year pupils are assessed against the Early Learning Goals relating to 'Number' and 'Shape, Space and Measures'.

Pupils are taught mathematics through a mixture of teacher-led activities and child-initiated play. Resources are provided that promote mathematical development and a love for learning. Number rhymes, songs and stories are an integral part of the curriculum and opportunities to count, use measures and problem solve are incorporated into the daily routine. The role play area is often a focus for mathematical learning and numbers are displayed in both the indoor and outdoor areas.

We are a member of the NCETM Mastering Number project across Early years Foundation Stage and Key Stage 1. This project aims to secure firm foundations in the development of good number sense for all children from Reception through to Year 1 and Year 2. The aim over time is that children will leave KS1 with fluency in calculation and a confidence and flexibility with number. Attention will be given to key knowledge and understanding needed in Reception classes, and progression through KS1 to support success in the future.

# **Inclusion and Equal Opportunities:**

All children are provided with equal access to the mathematics curriculum. We aim to provide suitable learning opportunities regardless of gender, ethnicity or home background.

# Special Educational Needs & Disabilities (SEND):

We teach mathematics to all children, including those with SEND. Work in this subject takes into account the targets set for individual children in their Individual Provision Maps. This work should be linked to the learning objective being followed by other children in the class. Resources are available to enable teachers to do this.

## **Calculations Policy:**

The school has Addition and Subtraction Calculation and Multiplication and Division Calculation Policies which clearly set out the methods employed by staff and children for the four key operations. This ensures that the teaching of written and mental methods is consistent and progressive throughout the school, reflecting the requirements of the National Curriculum.

## **Assessment and Tracking:**

Assessment is integral to successful teaching and learning and is a continuous process. Teachers make assessments of children through: regular marking of work; analysing errors and identifying misconceptions; asking questions; facilitating discussions; and making observations. Lessons are adapted accordingly.

Years 2 and 6 complete past SATs papers on a termly basis, whilst other year groups sit NfER assessments. These results are used in conjunction with teacher assessment to measure individual children against the Target Tracker statements covering the mathematical objectives for each year. This careful tracking process helps teachers assess each child, including summative assessment at the end of the year (when Years 2 and 6 sit the national SATs papers in May).

Children who are vulnerable to underachievement are tracked carefully by the class teacher and discussed at termly Pupil Progress meetings. Likewise, children who are not making expected progress are also discussed at the meeting.

For further information please refer to the school's Assessment Policy.

## **Marking and Self-Assessment:**

Work is marked against success criteria with teachers carrying out a two pen system – green pen to indicate work marked in the lesson and blue pen denoting work marked after the lesson. Work marked by children in Key Stage 2 is carried out in purple. Children self-assess their work. Please refer to the school's Marking and Feedback Policy for more details.

#### Resources:

Each class has a stock of appropriate resources that are accessible to every child throughout each lesson. Additional equipment / resources are stored centrally for both Key Stage 1 and Key Stage 2. Teachers and pupils have access to online resources via laptops and iPads, including our multiplication tables resource – Times Tables Rock Stars.

#### Homework:

Homework is set in accordance with the school's Homework Policy and includes parental involvement.

## Monitoring and Review:

Monitoring the quality of teaching in mathematics is the responsibility of the Subject Leader, Phase Leaders, Deputy Headteacher and Headteacher. The Subject Leader monitors the quality of teaching and learning through lesson observations, book scrutiny, pupil perceptions and discussions with teaching staff. The work of the Subject Leader involves supporting colleagues in the teaching of mathematics, being informed about current developments in the subject, and providing a strategic

lead/direction for the subject in the school. The Subject Leader will report to the Senior Leadership Team strengths and weaknesses in the subject, indicating areas for further development and how those improvements might be achieved.