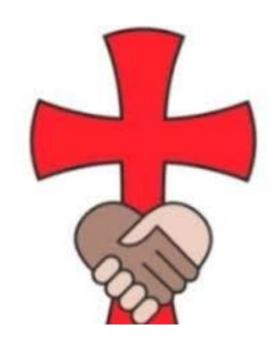
# St Matthew's Church of England Primary School



# Maths Policy

2024

#### Introduction

At St Matthew's, we believe that mathematics is a vital tool for everyday life that equips pupils with a uniquely powerful set of skills to understand and change the world. These tools include logical reasoning, problem solving skills and the ability to think in fluently in abstract ways. It 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 throughout their lives.

# Purpose of study

Mathematics is a creative and highly interconnected 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.

(The National Curriculum for Mathematics 2014)

#### Curriculum Aims

The Nation Curriculum for Mathematics aims to ensure that all pupils:

- become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately
- reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions

(The National Curriculum for Mathematics 2014)

Through the teaching and learning of mathematics, we aim to provide pupils with:

- an age appropriate curriculum which includes opportunities to apply fluency in a variety of ways
- the tools to reason mathematically
- challenging problems which require a deep understanding of a range of mathematical concepts
- an enjoyment of maths and the opportunity to develop a confident and curious approach to the subject
- real life contexts in which to apply mathematical concepts

- a confidence to communicate ideas in written form and orally using correct mathematic vocabulary
- the apportunity to work both independently and collaboratively to share ideas and solve problems

# Teaching and Learning

At St Matthew's we follow a mastery approach to teaching maths. This approach has mathematical problem solving at its heart and aims to give all children a deep, conceptual and sustainable understanding of mathematical concepts. This is achieved through covering fewer topics in greater depth. Pupils master concepts rather than learning procedures by rote. They do this using concrete objects and pictorial representations before moving to abstract symbols (numbers and signs).

#### Maths Lessons

Each class teacher is responsible for the mathematics in their class in consultation with, and with guidance from, the maths subject leader. There is a daily mathematics lesson of I hour and I5 minutes. This is split into 3 parts; arithmetic (I5 minutes), MiniMaths (I5 minutes) and the main lesson (45 minutes). The arithmetic session is where children are taught and given an opportunity apply arithmetic skills. This is planned using the St Matthew's arithmetic progression ladder to ensure arithmetic progression across school. There is a I5 minute 'mini-maths' session that can be taught before or after the main session. This is used to recap previously taught skills identified by class teachers and differentiated according to needs of each class. There is then a 45-minute lesson, planned and taught following the St Matthew's Long-Term Planning Guide and National Curriculum, which focuses on the mastery of core topics to build deep understanding.

During maths lessons, children will be exposed to:

- practical learning
- · pictorial representations of learning
- formal written methods
- investigational work
- precise mathematical language
- consolidation of basic skills and routines

Teachers of the EYFS ensure the children learn through a mixture of adult led activities and child initiated activities both inside and outside of the classroom. Areas of provision within the classroom support maths, ensuring children are able to access throughout the day to practise and develop skills being taught. In addition, consistent, daily maths lessons take the form of direct teaching, which is followed up by enhanced activities placed in areas of provision in the classroom which may be accessed independently or supported by an adult.

# Planning

The National Curriculum Programmes of Study provides the basis for maths planning in Key Stage I and 2. All classes will follow the St Matthew's Yearly Overviews which detail the curriculum statements that are to be taught each week. Planning must be typed onto the maths planning pro-forma stating the curriculum aims, assessment objectives and include a medium-term plan for the topic being taught. All children within the class must work on the same learning objectives and differentiation must be planned for through fluency, reasoning and problem solving and use of support and manipulatives. A copy of the planning guidance documents is available on the shared area or from the maths subject leader.

#### Assessment

#### Formative Assessment

Formative assessment is used daily by teachers and support staff to monitor children's learning and identify strengths and areas to develop. Classwork is assessed daily through marking, analysing children's errors, questioning and discussion. Learning is recording in maths books and is marked and feedback is given in line with the marking and feedback policy. Planning is adapted where necessary to suit the needs of the class and individual children.

#### Summative Assessment

Maths is assessed using the St Matthew's Teacher Assessment sheets. Each child has their own sheet to be completed by the teacher who is teaching their maths lessons. For each objective, there should be a Show Off Maths sheet with test-style fluency and reasoning questions. Evidence is collected in Show Off Maths lessons (taught in Mini-Maths/arithmetic sessions) and completed independently. Show Off Maths takes place at least 2 weeks after the unit has been taught.

Termly NFER (SATs in Year 2 and 6) tests are used termly and the standardised scores are added to Insight Tracker, alongside the teacher assessed judgment, in line with the St Matthew's Assessment Policy.

#### Marking and Feedback

Pupils' work is marked in line with the Marking and Feedback Policy; Learning Objectives are highlighted green, yellow or pink, where necessary, marking should model how corrections should be made, giving pupils a chance to learn from their misconceptions or incorrect methods. Incorrect spelling of mathematical vocabulary should be identified with 'sp' beneath the word, the correct word is then spelt below the marking and the children are expected to correct the word and practise spelling it three times.

#### Inclusion

All children at St Matthew's have an equal entitlement to access the Maths curriculum and make progress in order to attain the best they can in the subject. Children with special education needs and EHCPs receive daily mathematics lessons which provide activities to support their learning at the level they are working at through the support of additional staff and appropriate activities and resources.

# Home Learning

Children from Year 1-6 receive a Numbots and Times Table Rockstars login and will told to revise key arithmetic skills weekly. This is to be given out with learning logs on Friday and completed by the following Wednesday. This will be monitored weekly by teachers to ensure that it is being completed. Learning log tasks are set which link to maths learning at least once each half term and any additional maths tasks are discusses with the teacher, child and parents.

# Role of Subject Leader

- Ensures teachers understand the requirements of the National Curriculum and helps them to plan lessons.
- Leads by example by setting high standards in their own teaching.
- Prepares, organises and leads CPD and joint professional development.
- Works with the SENCO and SLT.
- Observes colleagues with a view to identifying the support they need.
- Discusses regularly with the head teacher, deputy head teacher and governors the progress of implementing National Curriculum for Mathematics in school.
- Monitors and evaluates mathematics provision in the school by conducting regular work scrutiny, learning walks and assessment data analysis.
- Be available to discuss with SLT, class teachers, parents and governors the progress of maths in the school.

#### Resources

In order to support the delivery of maths lessons to all children, the school has a large range of resources available. Within the classroom each year group has a set of age-appropriate resources to enable the practical teaching of number and place value objectives as detailed in the calculation policy. These maths resources are available to children at all times. Other resources are stored in the staffroom (Windmill Lane) or the hall cupboard (Croxall Way) in labelled boxes. All resources are audited annually.