Grimsargh St Michael's C of E Primary School

Mathematics Policy

Let your light shine before people so that they may see your good works and glorify your Father in heaven (Matthew 5: v.16)

Inspiring, believing and achieving in our loving Christian community

This policy reflects the school values and philosophy in relation to the teaching and learning of Mathematics at Grimsargh St Michael's C of E Primary school. The aim of the policy document is to provide guidance and clarification of the teaching of Mathematics and to ensure curriculum continuity and pupil progression throughout the school. The structures and principles within the National Curriculum for Mathematics (2014) complement the teaching ideals outline within this policy document. The responsibility for the implementation of this policy falls upon: the governing body, the subject leader, Headteacher, teaching and support staff.

The Nature of Mathematics

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. (National Curriculum 2014)

The purpose of our Mathematics Curriculum is to develop:

- A positive attitude towards mathematics
- A creative subject that is inherent in other curriculum areas and allowing for a broad and balanced curriculum
- To provide children with the skills necessary to carry out problems, that link in with everyday life.
- To develop the mind and encourage the learner to understand more about the world in which he/she lives
- An ability to solve problems, to reason, to think logically and to work systematically and accurately.
- An ability to work both independent and with others
- Competence to draw upon mathematical concepts, skills and knowledge.

The Breadth of Study

All children are different and so are the ways in which they learn. In order to cater for this, teachers use a variety of teaching approaches to enhance children's learning in mathematics. Children are challenged to achieve their potential whatever their ability; by being encouraged to participate in all lessons and engage in independent, paired or group activities learning with peers.

Through careful planning, we aim to ensure that throughout the school, children are given opportunities for:

- problem solving
- reasoning
- fluency
- open ended investigations
- practical activities and maths games
- using the outdoors
- skills practice, mental calculation and recall of facts

Teachers Planning and Organisation

Each class teacher is responsible for the mathematics learning in their classroom and should ensure there is a daily maths lesson taught every day. These lessons should involve:

- revisiting previous learning as part of a warm up activity
- a clearly focused teaching that will build upon previous learning and ensure progression
- an emphasis on embedding fluency
- the opportunity to reason and problem solve

Each lesson should last between 45-60 minutes.

In EYFS, the teacher will ensure that children are given the opportunity to build upon their previous knowledge and explore their next steps both within adult guided activities and child- initiated activities. Opportunities for mathematics learning will be available in continuous provision, both inside and outside, and adults will question children to move their learning forward.

Long Term Planning

Long term planning for mathematics taught in the school is provided by The National Curriculum for Mathematics 2014, Development Matters and the Early Learning Goals (Number, Shape Space & Measure).

Medium Term Planning

Teachers in Y1-6 use White Rose Hub as a starting overview for structuring the learning. These are then adapted and modified to include opportunities from different resources such as NCETM and NRich. Teachers should use the Progression of Skills document to ensure there is progress. EYFS planning is based on Development Matters and the Early Learning Goals, which is linked to the Mastering Number initiative, created by NCETM. Staff should also use the progression in vocabulary document and arithmetic expectation document.

Short Term Planning

Lessons are planned using the teachers planning of choice; this can be White Rose Hub or the teachers own preferred planning format.

Declarative Knowledge

Teachers in Y1-5 deliver a 10-15 minute session, at least three times a week, outside the daily maths session, which focuses on declarative knowledge of facts and concepts. In Y1 and 2, children carry on the work they began in EYFS by using Mastering Number from NCETM. In Y3, children follow the new approach from NCETM Masterning number that bridges learning from y2 into y3. In Y4 and 5, children will have daily lessons based on the Mastering Number in KS2 scheme created by NCETM. Testbase arithmetic tests will be completed at least 3 times during a half term. Arithmetic homework will be sent home, weekly, in y5/6 from September and in y4 from January.

Special Educational Needs

Children with Special Educational Needs are identified as early as possible and these needs are catered for in accordance with the school's SEN policy. Each daily mathematics lesson is inclusive of all children and teachers should consider what is needed to support each child, this could be use of manipulatives, a different activity or adult support. Where required, children's TLP targets should incorporate objectives from the National Curriculum and these can be taught through daily lessons or in 1:1 (or group) interventions outside of the maths teaching time.

Equality

Each child regardless of age, race or gender has entitlement to the maths curriculum at an appropriate level, if they are to achieve their full potential in the subject. Mathematical language, knowledge and skills are introduced in the school from the early years onwards. We endeavour to deliver the mathematical content through materials, which represent the world to children, as they understand it. The school tries to address the needs of all children with regard for their culture, gender, ethnic origin and lifestyle, ensuring that we do not present examples in a stereotypical way.

Pupils Records of Work

Children are taught a variety of methods for recording their work and they are encouraged and helped to use the most appropriate and convenient method of recording.

In EYFS, children's progress is recorded informally within the setting. E.g. drawings, physical activities or on whiteboards. Progress evidence is kept within the teacher's half termly checkpoint assessments. Independent maths shown within provision is filed into children's learning journeys and referenced.

In Year 1, evidence of children's independent learning is kept in a file until the summer term. Children's work can be evidenced in photo form, if deemed it to show evidence of children's knowledge. A specific explanation must be stuck by the picture to explain the learning that has taken place. From the summer term, children should move to a maths book and encouraged to lay out learning themselves in squares, ready for transitioning to year 2.

In Year 2, children's work is recorded in their maths books. Children's work is also evidenced in photo form when using manipulatives, engaging in problem solving tasks, group work or when outdoor learning has taken place. This evidence shows individual knowledge of a maths concept.

In KS2, children's work is recorded in maths books of 1cm squares (Y3-5) and 7mm squares (Y6). This may take the form of 2 or 3 tasks on a worksheet developed using White Rose or NCETM problems. All children are encouraged to work tidily and neatly when recording their work. A digit should be used in each square. Photo evidence can be used to evidence group work, problem solving activities, outdoor learning and work with manipulatives as long as it shows individual knowledge of a concept. Children must respond to the pictures by writing a statement about what learning has taken place and how they feel about it.

Feedback and Marking
See the Feedback and Marking Policy for detail.

Monitoring
The maths subject leader is responsible for monitoring the delivery of maths across the school. Planning can be monitored to ensure progression and will follow a purpose linked to the school development plan. 'Book scrutiny' provides an overview of learning within maths and observations are taken place in line with the school improvement plan. Informal learning walks may take place to ensure consistency across school.

Assessment
Pre-teach for assessment is completed before each new unit of work to ensure that teachers cater for gaps in understanding before moving forward with their year group work. Progression documents are used to support this.

Teachers make daily assessments of children and their progress and adapt their planning accordingly to ensure misconceptions are addressed and extra opportunities are made available to meet an objective. Verbal feedback is given to children to promote pupil confidence through positive and engaging interaction. Same day intervention is carried out within the lesson; where children are identified and given extra support before being given time to work independently.

Termly assessments are carried out across the school (Y1-6). These materials are to be used alongside judgements from class work to form a teacher assessment for each child. These judgements are then inputted into the Pupil Tracker.

Y6 to complete SATs assessments every May.

Children in year 2 will sit 'Optional KS1 SATs papers' at the end of the academic year. This will be at the same time as when years 1, 3, 4 and 5 sit the end of year NFER tests.

In EYFS, the children are assessed against the development matters objectives. Baseline assessments are made on entry to school and progress is tracked termly.

Y4 children will carry out the 'multiplication check' test in June of each year. These will be used to identify interventions in subsequent year groups.

Parental Involvement
Parents are informed of their children's progress in maths through the twice-yearly parent/teacher meetings. Reports are given before the end of the summer term and teacher assessments are shared with parents. Parents are informed whether their child has met the expected standard, working below the expected standard or working at a greater depth.

Home Learning
See the Home Learning Policy for more detail

Staff Development
Staff are encouraged to develop, assess and improve their teaching of mathematics by and are supported, where possible, by:

- attending staff meetings for updates led by the subject leader
- providing resources
- given the opportunity to attend maths courses
- provide the opportunity to work with peers
- encouraging the use of online CPD documents created by NCE

Resources

Classroom resources should be easily accessible for children and they should be encouraged to choose their resources independently. Boxes of well-chosen manipulatives are used within lessons and children are taught how to use appropriate manipulatives to aid learning. Displays should be meaningful for the children and contain content that is currently being covered and key vocabulary. Children should be encouraged to look at the displays and use them as a reminder of skills and concepts. Resources that are not used regularly are kept in the cupboard in the hall. These resources are clearly labelled.

Governors

The school has a Maths governor who meets with the subject leader to discuss the teaching and progress in mathematics. They will discuss the aims of the following year with the subject leader and feed this back in the curriculum meeting.

Signed**: Mrs Penny Todd**

Date: **July 2025**

Review Date: **July 2026**

Agreed by the Curriculum Committee**: 01.10.2025**