



# Mauldeth Road Primary School

## Mathematics Policy



## Introduction

Children come to school with various mathematical experiences. Throughout the pre-school years children will have gained an increased awareness of number, shapes and measures in their practical activities.

Mathematics equips pupils with a set of tools that give them the ability to tackle a range of practical and real life situations. These tools include logical reasoning, problem solving skills and the ability to think in abstract ways.

Mathematics enables children to understand and appreciate relationships and pattern in both number and space in their everyday lives.

Mathematics is a creative discipline. It can stimulate moments of pleasure and wonder when a pupil solves a problem for the first time or sees hidden connections.

The mathematics curriculum should be bold, provide breadth and balance and be relevant and differentiated to suit the needs of all children in the modern world. It should be flexible, motivating all pupils, thus encouraging success at all levels.

## Aims

This policy aims to ensure that all staff, children, parents/carers and governors are aware of the aims for learning and teaching Mathematics at Mauldeth Road and that these are consistently applied.

## School Staff

- To promote a confident, positive attitude towards the learning and use of mathematics making it an enjoyable experience
- To promote confidence and competence with numbers and the number system;
- To promote the ability to solve problems through connecting ideas, decision making and applying their mathematical skills in a range of contexts, including other subjects such as Science;
- To promote mathematical reasoning by following a line of enquiry, developing an argument and making justifications using mathematical language;
- To promote a practical understanding of the ways in which information is gathered, presented and used;
- To promote the exploration of features of shape and space and develop measuring skills in a range of contexts
- To understand the importance of mathematics in everyday use, especially in relation to essential life skills, such as telling the time and understanding money.

## Governors

To appoint a designated link governor who will:

- a) meet with the mathematics subjects leader at least once a year to find out about;
  - the school's systems for planning work, supporting staff and monitoring progress;
  - the allocation, use and adequacy of resources
  - how the standards of achievement are changing over time.
- b) report back to the governing body annually with updates and recommendations, if appropriate, once a year.
- c) Attend relevant governor training linked to the maths curriculum.

- To be understanding and supportive of our aims in the learning and teaching of Mathematics and to review this policy annually

### Children

- To develop an enjoyment of learning through practical activity, investigation, exploration; mental exertion and discussion;
- To develop confidence and competence with numbers and the number system;
- To develop the ability to solve problems through connecting ideas, decision-making and applying their mathematical skills in a range of contexts, including other subjects such as Science;
- To develop the ability to reason mathematically by following a line of enquiry, developing an argument and making justifications using mathematical language;
- To develop a practical understanding of the ways in which information is gathered and presented;
- To explore features of shape and space, and develop measuring skills in a range of contexts;
- To understand the importance of Mathematics in everyday life, especially in relation to essential life skills such as telling the time and handling money; and
- To foster positive attitudes towards Mathematics by developing pupils confidence, independence, persistence and co-operation skills.
- Interventions and differentiations if needed

### Parents and Carers

- To be understanding and supportive of our aims in learning and teaching Mathematics.
- To attend and contribute to Parent Consultation Meetings.
- To support their children with Mathematics homework activities (please refer to Homework Policy) including the importance of learning their number bonds and times tables off by heart. To praise their children for the good things that they do in Mathematics.
- To communicate and work with School whenever further support is needed to develop their children's mathematical skills and understanding.

### Foundation Stage

- Our Foundation Stage teachers use the Early Years Foundation Stage Curriculum to support their teaching of Mathematics in the Foundation Stage.
- The children have the opportunity to talk and communicate in a widening range of situations and to practice and extend their range of vocabulary and mathematical skills.
- The children explore, enjoy, learn about, and use Mathematics in a range of personalised situations.
- Mathematics is planned on a weekly basis and assessed using the criteria from the Early Learning Goals.
- Mathematics is taught both as a discrete subject and within the whole Early Years Curriculum to give children opportunities to use their mathematical skills in real life situations.

### Key Stage 1 and Key Stage 2

Lessons for KS1 and 2 children at Mauldeth Road are designed so that everyone in the class works on mathematics at the same time. The basic structure of the lesson is the same for all classes so they meet a familiar way of working as they move from class to class. Lessons will include: -

Mental starter or opportunities for using mental strategies  
 Direct teaching input to whole class and/or groups  
 Group/paired/independent work

A plenary session takes place at the end of the lesson, although this is increasing being replaced by mini plenaries during lessons

Important features of our maths teaching are as follows:

- Each new unit of work is introduced to the class as a whole
- Children are involved in paired, group work and independent tasks
- Children develop a range of methods of calculating e.g. mental, pencil and paper
- Children are offered regular opportunities to develop their mathematical knowledge and skills through tackling problems and puzzles
- Children develop skills in using a range of mathematical tools through practical work
- Children use ICT to enhance their numeracy learning
- There is a daily mathematics lesson for all children which lasts from about 45 minutes in Key Stage 1 and 50 to 60 minutes in Key Stage 2. Children will have a further 4 mini-lessons a week to improve maths fluency and number recall.
- Reception, Year 1 and Year 2 will be completing NCETM Mastering Number sessions alongside their maths lessons to improve their understanding of number composition as well as fluency and recall.

## Planning

Planning involves long, medium, short-term plans.

### 1. Long term planning

These have been written using objectives taken directly from the National Curriculum 2014, providing a balance of topic and skills coverage throughout the year.

### 2. Medium term planning

Planning teams develop these at beginning of each term, taking into account:

- The objectives to be covered from the National Curriculum 2014
- Children's progress during the previous half term
- Curricular targets

### 3. Short term planning

These are completed on weekly basis with planning teams deciding upon the objectives to be covered from the Medium term planning and how problem solving skills and mental calculation strategies will be addressed alongside these.

## Equal Opportunities

There is a commitment to high achievement in maths by all children regardless of gender, race, class, or disability. The language used in materials should reflect this.

## Classroom Organisation and Management

The most effective teaching will make use of a range of organisational strategies in a purposeful manner. The children's working experiences when learning and using maths are based on

- exposition by the teacher
- discussion with the teacher
- discussion between pupils
- individual work
- group work
- class work
- investigative work – oral written
- practical problem solving

The aim of the classroom management of mathematics is to organise in such a way that:

- classroom resources are used in the way most likely to promote learning
- pupils are grouped to facilitate a variety of classroom activities
- that pupils are aware of expectations and conventions regarding classroom behaviour

## Recording Work

Children are encouraged to record and communicate their maths in a variety of ways, orally, on white boards, pencil and paper, using place value cards, digit cards etc.

Children are encouraged to compare and discuss different methods of calculations and mathematical reasoning behind problem solving.

## Assessment

1. Teacher evaluates children's work each day during the lesson.
2. Children not achieving or exceeding the learning objectives are recorded.
3. Children are encouraged to write/talk about what work/what they have learnt.
4. Children complete pre and post learning tasks to show the progression of their understanding in a topic
5. Children complete formative assessments at the end of each term from year 1 upwards. These help teachers to identify areas of strength and weakness.
6. Children's work is moderated across the year group so that a termly judgement of a child's achievement in maths can be made. The judgement made is that the child is:
  - **WT** (working towards the expectations for their year group; there is a sub-category for those who are well below and working from a different year group's expectations)
  - **EXP** (achieving the expectations for their year group)
  - **EXC** (exceeding the expectations for their year group)
7. Statutory assessments at the ends of key stages and the times table check in Year 4 are undertaken

## Reporting to Parents

1. Teachers consult and advise parents about the mathematical progress of their children at parent's evenings.
2. Key instant recall facts are sent home for each child showing expectations so that parents can help their children.
3. A specific section of the annual written report will provide clear information about children's overall progress against year group expectations

### Staffing and Resources

1. Provision is made for the mathematical development of staff through courses and support from the co-ordinator.
2. The co-ordinator writes an action plan in the summer term ready for the following year.
3. A wide range of maths resources are available in classrooms and in the maths store, providing children with the practical experience needed to make maths fun and embedded in everyday life.

### Marking

Please refer to the school's marking policy.

Reviewed By	Teaching and Learning Committee
Review	Annually
Last Reviewed	January 2024
Next Review	January 2025