

Great Orton
Primary School

Policy for Mathematics

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POLICY FOR MATHEMATICS

1. INTRODUCTION

Mathematics equips pupils with a powerful set of tools to understand and change the world. These tools include logical reasoning, problem solving skills and the ability to think in abstract ways.

Mathematics is important in everyday life. 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 to for life.

The National Curriculum order for mathematics describes what must be taught in each key stage. Great Orton Primary School follows the New National Curriculum 2014, we use the Focus publication: 'Key Assessment Criteria' which provides detailed guidance for the implementation of the National Curriculum for mathematics. This ensures continuity and progression in the teaching of mathematics.

This policy follows a whole school format and rationale.

2. RATIONALE

All school policies form a corporate, public and accountable statement of intent. As a primary school it is very important to create an agreed whole school approach of which staff, children, parents, carers, governors and other agencies have a clear understanding. This policy is the formal statement of intent for mathematics. It reflects the essential part that mathematics plays in the education of our pupils. It is important that a positive attitude towards mathematics is encouraged amongst all our pupils in order to foster self-confidence and a sense of achievement. The policy also facilitates how we, as a school, meet the legal requirements of recent Education Acts and National Curriculum Requirements.

3. SCOPE

This statement of policy relates to all pupils, staff, parents, carers and governors of Great Orton Primary School. The age range of our pupils must be acknowledged in the creation of policy and the development of the mathematics curriculum.

4. PRINCIPLES

The principles of Great Orton Primary School for mathematics are:

- policy and provision are evaluated and reviewed regularly
- resources of time, people and equipment are planned, budgeted for and detailed when appropriate in the School Improvement Plan.
- the governing body of the school discharges its statutory responsibility with regard to mathematics
- cross curricular links will be integrated where appropriate

- Planning of mathematics ensures continuity and progression across all year groups and key stages, and ensures the school's calculation policy underpins the written methods taught to each year group.
- teachers will strive to the best of their abilities, to deliver GOOD teaching of mathematics in all areas of the school.

5. AIMS

5.1 General

Although relating specifically to mathematics our aims for the subject are also in line with the school's general aims.

We aim to provide the pupils with a mathematics curriculum, which will produce individuals who are literate, numerate, creative, independent, inquisitive, enquiring and confident. We also aim to provide a stimulating environment and adequate resources so that pupils can develop their mathematical knowledge, skills and understanding to their full potential.

5.2 Specific

Our pupils should

- have a sense of the size of a number and where it fits into the number system
- know by heart number facts such as number bonds, multiplication tables, doubles and halves
- use what they know by heart to figure out numbers mentally
- calculate accurately and efficiently, both mentally and written, drawing on a range of calculation strategies
- recognise when it is appropriate to use a calculator and be able to do so effectively
- make sense of number problems, including real life problems, and recognise the operations needed to solve them
- discuss and explain their methods and reasoning using correct mathematical terms
- judge whether their answers are reasonable and have strategies for checking them where necessary
- suggest suitable units for measuring and make sensible estimates of measurements
- explain and make predictions from the numbers in graphs, diagrams, charts and tables in appropriate curriculum areas
- develop spatial awareness and an understanding of the properties of 2D and 3D shapes

6. PROVISION

Pupils are provided with a variety of opportunities to develop and extend their mathematical skills in and across each phase of education.

Lessons follow the practices of established and recognised high quality teaching, with a wide variety of learning styles catered for, with a mental/oral starter, a main teaching activity and a plenary session. The teaching of mathematics at Great Orton Primary School provides opportunities for:

- group work
- guided work
- paired work
- whole class teaching
- individual work

Pupils engage in:

- the development of mental strategies
- written methods
- practical work
- investigational work
- problem solving
- mathematical discussion
- consolidation of basic skills and number facts
- the appropriate use of ICT to support learning

At Great Orton Primary School we recognise the importance of establishing a secure foundation in mental calculation and recall of number facts before standard written methods are introduced.

Mathematics contributes to many subjects and it is important children are given opportunities to apply and use Mathematics across the curriculum and in real contexts.

We endeavour at all times to set work that has high expectations for all, is challenging, motivating and encourages pupils to talk about what they have been doing.

6.1 Early Years

We broadly follow the areas of learning as outlined by the Early Years Foundation Stage.

6.2 Key Stage 1

See Primary Framework Year 1 and Year 2 learning overviews and National Curriculum programmes of study.

6.3 Key Stage 2

See Primary Framework Year 3 to Year 6 learning overviews and National Curriculum programmes of study.

7. ASSESSMENT

Assessment is regarded as an integral part of teaching and learning and is a continuous process. It is the responsibility of the class teacher to assess all pupils in their class.

In our school we are continually assessing our pupils and recording their progress. We see assessment as an integral part of the teaching process and strive to make our assessment purposeful, allowing us to match the correct level of work to the needs of the pupils, thus benefiting the pupils and ensuring progress.

Termly teacher assessments will be produced using Teacher Assessments, informed by use of Optional SAT tests, White Rose Assessments, Children's work in books and Tapestry information

Information for assessment will be gathered in various ways: by talking to the children, observing their work, marking their work, and through feedback from peer and self-assessment sessions. For more detail please see the Assessment and Marking Policy. Teachers will use these assessments to plan further work.

See school assessment policy for specific detail.

8. ROLE OF SUBJECT LEADER

The mathematics subject leader is responsible for co-ordinating mathematics through the school. This includes:

- ensuring continuity and progression from year group to year group
- providing all members of staff with guidelines, a scheme of work and a calculation policy to show how aims are to be achieved and how the variety of all aspects of mathematics is to be taught
- advising on in-service training to staff where appropriate. This will be in line with the needs identified in the Development Plan and within the confines of the school budget
- advising and supporting colleagues in the implementation and assessment of mathematics throughout the school
- assisting with requisition and maintenance of resources required for the teaching of mathematics. Again this will be within the confines of the school budget

9. ROLE OF CLASS TEACHER

- to deliver GOOD lessons, in accordance with Great Orton Primary School's one year development plan

- to ensure progression in the acquisition of mathematical skills with due regard to the National Curriculum for mathematics, and in accordance, where relevant, with the Great Orton Primary School Calculation Policy
- to develop and update skills, knowledge and understanding of mathematics
- to identify inset needs in mathematics and take advantage of training opportunities
- to keep appropriate on-going records
- to plan effectively for mathematics, liaising with subject leader when necessary. See Primary Framework for details of short, medium and long term planning procedures
- to inform parents of pupils' progress, achievements and attainment

10. PERFORMANCE INDICATORS

Performance Indicators, which are the criteria for success of the school's mathematics policy at Great Orton Primary School are:

- At KS2 (target for year)
- At KS1 (target for year)
- children enjoy mathematics
- children talk confidently about what they are doing in mathematics

11. EQUAL OPPORTUNITIES

We incorporate mathematics into a wide range of cross-curricular subjects and seek to take advantage of multicultural aspects of mathematics eg. Islamic patterns in RE.

All children have equal access to the curriculum regardless of their gender. This is monitored by analysing pupil performance throughout the school to ensure that there is no disparity between groups.

12. PARENTAL/CARER INVOLVEMENT

At Great Orton Primary School we encourage parents and carers to be involved by:

- inviting them into school twice yearly to discuss the progress of their child
- inviting them into school in the summer term to discuss the yearly report
- inviting them to curriculum information sessions or circulating information via half termly newsletters when significant changes have been/are made to the mathematics curriculum
- inviting parents/carers of Year 6 pupils to a meeting in January on supporting their children with SATs
- encouraging them to help in classrooms
- holding workshops for parents/carers focusing on areas of mathematics

13. GOVERNING BODY

At Great Orton Primary School we have an identified governor for numeracy and is invited to attend relevant school INSET.

The numeracy governor visits the school termly to talk with the subject leader and when possible, observes some daily mathematics lessons.

The numeracy governor reports back to the curriculum committee on a regular basis. For further details please see Calculation Policy.

This policy was agreed by the Governing body on 21st May 2018
To be reviewed in 2 years

Chair ...L Thorp.....

HeadteacherJ Robertson.....