

NORFOLK COMMUNITY PRIMARY SCHOOL

MATHEMATICS POLICY STATEMENT

Why we Teach Mathematics?

Mathematics equips pupils with a uniquely 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. These skills can be used in all subject taught at Norfolk.

Mathematics is important in everyday life, many forms of employment, science and technology, medicine, the economy, the environment and development and in public decision-making. Different cultures have contributed to the development and application of mathematics. Today, the subject transcends cultural boundaries and its importance is universally recognised. Mathematics is a creative discipline. It can stimulate moments of pleasure and wonder when a pupil solves a problem for the first time, discovers a more elegant solution to that problem, or suddenly sees hidden connections.

(National Curriculum Orders 2000)

Aims

The mathematics teaching at Norfolk Community Primary School is geared towards enabling each pupil to develop within their capabilities; not only the mathematics skills and understanding required for later life, but also an enthusiasm and fascination about maths itself.

We aim to increase pupil confidence in maths so they are able to express themselves and their ideas using the language of maths with assurance.

We are continually aiming to raise the standards of achievement of the pupils in Norfolk Community Primary School.

The Revised Mathematics Framework

Norfolk Community Primary School follows the National Numeracy Revised Strategy Framework, which provides detailed guidance for the implementation of the Orders and ensures continuity and progression in the teaching of mathematics.

Every teacher in Norfolk Community Primary School has access online to a copy of the Framework for teaching mathematics.

In Early Years, the curriculum is guided by the Early Years Foundation Stage (EYFS)

Planning

Planning is undertaken at three levels:

Long term planning is based on the yearly teaching programmes set out in the Revised Framework. Teachers generally follow Blocks A – E in order.

Medium term planning is carried out half-termly. Teachers select their main teaching objectives from the yearly teaching programme and use the Framework to ensure a balanced mathematics curriculum. At Norfolk Community Primary School we recognise the need to revisit topics regularly to revise and consolidate skills and then extend them. Every objective in the yearly teaching programme is covered at least once by the end of the year.

Short term planning is carried out weekly. These plans include learning objectives for the mental oral starter and the main activity, pupil learning outcomes, differentiation, key vocabulary, cross-curricular links and notes for the next lesson.

The medium and short term planning is collected and monitored by the maths co-ordinator and senior management team.

Cross-Curricular Links

Mathematics is taught mainly as a separate subject but every effort is made to link maths with other areas of the curriculum. We try and identify the mathematical possibilities across the curriculum at the planning stage. We also draw children's attention to the links between maths and other curricular work so children see that maths is not an isolated subject. We as a school are working to develop a curriculum where Maths is taught in all subjects.

In the Early Years, these links are more evident because of the less formal timetable.

Teaching Methods and Approaches

Lessons generally follow the NNS format with a mental and oral starter, a main activity and a plenary session. In Foundation the aim is to have prepared the children by the end of the year for a daily 45-minute maths lesson.

The teaching of maths at Norfolk Community Primary provides opportunities for:

- Group 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 routines

At Norfolk Community 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. We also put a great deal of time into problem solving, specifically word problems.

Norfolk Community School has a whole school focus on Assessment for Learning Strategies. These are visible in all maths lessons with teachers using assessment strategies as well as pupils using self-assessment strategies.

We endeavour to set work that is challenging, motivating and encourages the pupils to talk about what they have been doing.

Organisation

In K.S.1 mathematics lessons are held on a daily basis and last for approximately 60 minutes. The children are taught in mixed ability classes. When children start in Foundation the organisation is more flexible building up to a daily 45-minute lesson in the summer term.

In K.S. 2 the daily maths lessons last for approximately one hour. Children in K.S. 2 are set according to ability for all maths lessons. There are two sets across each year group. These groupings are flexible and children are moved between sets after teacher consultation.

Assessment and Record Keeping

At Norfolk Community Primary we are continually assessing our pupils and recording their progress. We see formative and summative assessment as an integral part of the teaching process and endeavour 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. Assessment is carried out on two levels.

Short-term assessments are an informal part of every lesson and are closely matched to the teaching objectives. These tend not to be recorded because they are for the teacher's immediate attention and action; however, pertinent comments are occasionally recorded on the reverse of the short-term planning sheets.

Medium term assessments are carried out every term. The purpose of these assessments is to review and record the progress the pupils have made in relation to the key objectives. Children's progress is recorded in the pupil progress folders and class tracking sheets. These assessment feed into pupil progress meetings and are also used in Staff Performance Management Meetings.

Reporting

All parents receive an annual written report on which there is a summary of their child's effort and progress in mathematics over the year.

At the end of Key Stage 1 and Key Stage 2 each pupil's level of achievement against national standards is included as part of their annual written report.

Resources

Resources for the delivery of the maths curriculum are stored both centrally and in classrooms. Everyday basic equipment is kept in classrooms. Additional equipment and topic-specific items are stored centrally.

Norfolk Community Primary School uses a variety of source materials. Staff dip into Unit Plans as well as published schemes of work. We are fully aware that we should be 'scheme assisted not scheme driven.' Materials are constantly updated, as new and relevant items become available. The maths post holder orders new resources after consultation with the staff.

Equal Opportunities

As a staff we endeavour to maintain an awareness of, and to provide for equal opportunities for all our pupils in mathematics. We aim to take into account cultural background, gender and Special Needs, both in our teaching attitudes and in the materials we use with our pupils.

Children with Special Educational Needs

Wherever possible we aim to fully include SEN pupils in the daily mathematics lesson so that they benefit from the emphasis on oral and mental work and by listening and participating with other children in demonstrating and explaining their methods.

Where necessary teachers will, in consultation with the SENCO, draw up an Individual Educational Plan for a child. If a child's needs are particularly severe they will work on an individualised programme written in consultation with the appropriate staff.

When planning teachers will try to address the child's needs through simplified or modified tasks or the use of support staff.

Gifted and Talented

Norfolk Community Primary School has a number of Gifted and Talented Mathematicians. Staff are aware of these pupils and they are planned for. Where available these pupils have the opportunity to attend Mathematics activities outside of school.

Homework

Children are given mathematics homework once a week. The amount of homework set is about 10 minutes in KS 1 and about 15-20 minutes in KS 2. Not all homework is written work, which needs marking. We encourage teachers to set work, which makes use of the home context, inline with our Family Friendly Homework.

Staff Development and Training

The school makes use of local staff training and whenever possible enables staff to attend local courses and conferences as long as these link closely to the School Improvement Policy.

Leadership and Management

Andrew Evers will act as Mathematics Subject Leader

Monitor the school's provision for Mathematics

Monitor the progress of pupils across school in Mathematics using the pupil tracking files.

This policy will be reviewed every two years by the Mathematics Subject Leader.