Amotherby CP School
Mathematics Policy

Introduction

Amotherby Primary School provides all children with the skills they need for life in the 21st Century. We want our learners to be confident, happy, independent, inquisitive and co-operative. We want our children to possess the math skills they will need throughout their life.

Aims and objectives

Mathematics is a tool for everyday life. It teaches us how to make sense of the world around us through developing a child's ability to calculate, to reason and to solve problems. It enables children to understand and appreciate relationships and pattern in both number and space in their everyday lives and the wider world. Through their growing knowledge and understanding, children learn to appreciate the contribution made by many cultures to the development and application of mathematics.

Using the Programme of Study from the National Curriculum (2000) and the Renewed Strategy Framework for the teaching of mathematics, it is our aim to develop:

- A positive attitude towards mathematics and an awareness of the fascination of mathematics.
- Competence and confidence in mathematical knowledge, concepts and skills.
- An ability to solve problems, to reason, to think logically and to work systematically and accurately.
- Initiative and ability to work independently and collaboratively with others.
- An ability to use the language of maths
- An ability to use and apply mathematics across the curriculum and to real life situations
- An understanding of maths which is developed through a process of enquiry and experiment in a safe and stimulating environment.

Teaching and learning style

The school uses a variety of teaching and learning styles in mathematics lessons. Our principal aim is to develop children's knowledge, skills and understanding in mathematics. Wherever possible, we encourage the children to use and apply their learning in everyday situations.
Through careful planning and preparation we aim to ensure that throughout the school, children are given opportunities for :

- Practical activities and mathematical games
- Problem solving
- Individual, group or whole class discussions and activities
- A range of methods for calculation e.g. mental , pencil and paper and using a calculator
- Using a computer as a mathematical tool.

In all classes there are children of differing mathematical ability. We recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child.

Curriculum planning

Mathematics is a core subject in the National Curriculum. The fundamental skills, knowledge and concepts of the subject are set out in Mathematics in the National Curriculum where they are categorised into the following attainment targets at Key stage One and Key Stage Two :
Using and applying Mathematics
Number
Shape, Space and Measures
Handling Data

We carry out the curriculum planning in mathematics in three phases (long-term, medium-term and short-term).

Long Term:
The National Numeracy Strategy Renewed Framework gives a detailed outline of what we teach in the long term. .

- Counting, partitioning and calculating. (Block A)
- Securing number facts, understanding shape. (Block B)
- Handling data and measures.(Block C)
- Calculating, measuring and understanding shape. (Block D)
- Securing number facts, relationships and calculating.(Block E)

Medium Term :
Our medium-term mathematics plans ensure an appropriate balance and distribution of work across each term. Each year group visits the five strands three times each year and the objectives build upon each other in a cyclical fashion.

Short term planning
This contains details of what is to be taught in the daily maths session. It outlines the objective that is to be taught and the activities and differentiation for the children within the class. It also specifies the expected learning outcome for all children.

The Foundation Stage

During the foundation Stage, children will develop many of their mathematical concepts through structured play activities both adult and independent learning situations.

We teach mathematics in our Reception class through a variety of play centered activities. There is a maths area which is designed to promote maths through activity and the vocabulary of maths through talk. As the class is part of the Foundation Stage of the National Curriculum, we relate the mathematical aspects of the children's work to the objectives set out in the Early Learning Goals, which underpin the curriculum planning for children aged three to five.

Maths in other areas of the curriculum:

Maths skills are used and applied to all other curriculum areas and situations. Learning Maths in the outdoor environment and by first hand experiences allows to learn maths in real life situations and provides a meaningful learning experience.

Teaching mathematics to children with special educational needs

At our school we teach mathematics to all children, whatever their ability. Mathematics forms part of the school curriculum policy to provide a broad and balanced education to all children. If progress falls significantly outside the expected range, the child may have special educational needs and require additional support within school. Please refer to the separate Special Needs Policy for further detail.

Assessment and recording

There are two main types of assessment used within Mathematic lessons:
Assessment of learning (summative assessment)
Assessment for learning (formative assessment)

The assessment and recording of children's work and planning is undertaken in a manner that is consistent with the policy and practice of the school's Assessment, Monitoring and Recording policy.

Resources

There is a wide variety of concrete and abstract resources to support the teaching of mathematics across the school.

Parents
The teaching of maths is a partnership between home and school. Parents are kept informed on a regular basis about what their children are studying in class.

Monitoring and review
Monitoring of the standards of children's work and of the quality of teaching in mathematics is the responsibility of the head teacher and the mathematics subject leader. Please refer to the assessment and monitoring policy for further information.

Governing Body
The subject leader also liaises with the Governing Body and their appointed Governor for Mathematics to ensure that the Governors are aware of the progress of mathematics in relation to the school priorities and school action plans.

Signed:

Date: March 2012
Review date: March 2014