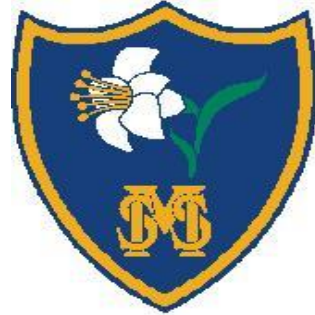


# Haddenham St Mary's CE School



## MATHEMATICS POLICY

Date agreed by <b>Curriculum Committee</b>	<b>03 May 2012</b>
Date to be reviewed ( <i>maximum 36 months after date above</i> )	<b>May 2015</b>
Date adopted by Governing Body	<b>08 May 2012</b>
Governors Committee accountable for review	<b>Curriculum</b>
Staff member accountable for review	<b>Headteacher</b>
Governor accountable for monitoring	<b>Numeracy governor</b>

## **NATURE OF MATHEMATICS**

Mathematics is an essential tool for everyday life. It is a whole network of concepts and relationships which provide a way of viewing and making sense of the world. It is used to analyse and communicate information and ideas and to tackle a range of practical tasks and real life problems. It also provides the materials and means for creating new imaginative worlds to explore.

Using the Programmes of Study from the National Curriculum and the National Numeracy Strategy Framework for Teaching Mathematics it is our aim to develop:

- a positive attitude towards mathematics
- 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 an ability to work both independently and in cooperation with others
- an ability to communicate mathematics
- an ability to use and apply mathematics across the curriculum and in real life
- an understanding of mathematics through a process of enquiry and experiment

## **SCHOOL POLICY AND THE NATIONAL CURRICULUM**

### Knowledge Skills and Understanding

In Key Stage 1 teachers use the NNS Framework for Teaching Mathematics as a basis to ensure that all parts of the National Curriculum Programme of Study are taught. In Reception, teachers use the EYFS.

### Breadth of Study

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

- individual, group and whole class discussions and activities
- practical activities, mathematical games and working with computers
- problem solving

- open and closed tasks
- a range of methods of calculating e.g. mental, pencil and paper
- Developing a range of strategies for calculating and understanding that mathematicians select the most appropriate and efficient strategy for the task.

## **SCHEME OF WORK**

Our school scheme of work is a working document and as such is composed of ongoing plans produced on a week by week basis. This is developed from the NNS Framework and takes into consideration the needs of our children.

It provides balanced coverage for all strands of maths:

- Using and applying
- Counting
- Number facts
- Calculating
- Understanding shape
- Understanding measure
- Handling data

## **A RICH CURRICULUM**

- Throughout the whole curriculum, opportunities exist to extend and promote mathematics within and across subjects. Teachers plan and seek to take advantage of all opportunities.
- Teachers also plan and seek creative opportunities for outdoor learning

## **TEACHERS' PLANNING AND ORGANISATION**

- Each class teacher is responsible for the mathematics in their class in consultation with and with guidance from the mathematics coordinator and senior leadership.
- The approach to the teaching of mathematics within the school is based on three key principles:
  - 1. a mathematics lesson every day**
  - 2. a clear focus on direct, instructional teaching and interactive oral work with the whole class and group**
  - 3. an emphasis on mental calculation**

- IN KS1 there is a daily lesson of between 45 and 60 minutes for mathematics
- Planning is monitored by the mathematics coordinator
- Teaching in Reception is based on objectives in the Framework for Reception and ensures that children are working towards scale points on the EYFS profile.
- Towards the end of Reception the teacher aims to draw the elements of a daily mathematics lesson together so that by the time children move into Year 1 they are familiar with a 45-minute lesson.

## **DIFFERENTIATION**

Differentiation is incorporated into all mathematics lessons in a variety of ways:

- Stepped Activities which become more difficult and demanding but cater for the less able in the early sections.
- Common Tasks which are open ended activities/investigations where differentiation is by outcome.
- Resourcing which provides a variety of resources depending on abilities e.g. Counters, cubes, 100 squares, number lines, mirrors.
- Grouping according to ability so that the groups can be given different tasks when appropriate. Activities are based on the same theme and usually at no more than three levels.

## **PUPILS' RECORDS OF THEIR 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.
- Children are encouraged to use mental strategies before resorting to a written algorithm.
- All children are encouraged to work tidily and neatly when recording their work.
- When using squared paper they are encouraged to use one square for each digit.

## **ASSESSMENT AND RECORD KEEPING**

- Teachers are expected to make regular ongoing assessment of each child's progress and to record these systematically.
- Informal Tests of Mental Maths will be carried out routinely followed immediately by discussion with the whole class so that any misconception can be put right and the merits of different approaches discussed.
- Written Tests - Teachers use the supplement of examples in the framework to plan assessment activities and written tasks as necessary.
- The work set combined with ongoing APP assessments helps to review how well children have taken in the topics taught and identifies any remaining misconceptions.
- Once a term, a judgement is made about children's level of achievement. Attainment is recorded and provided to headteacher and numeracy subject leader for monitoring and analysis.

## **MONITORING AND EVALUATION**

- The mathematics subject leader monitors teaching and learning in maths and reports to the headteacher for further monitoring and evaluation of progress and achievement.
- A numeracy governor is appointed and invited to attend INSET.
- The numeracy governor has the opportunity to observe and be involved in maths lessons?
- The numeracy governor reports to governing body.