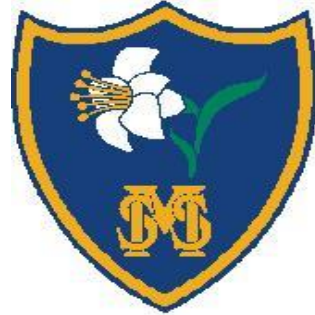


# Haddenham St Mary's CE School



## MATHEMATICS POLICY

## **Introduction**

Mathematics is the study of numbers, shapes and patterns. It is taught through two main sections.

1. Number
2. Shape, Space and Measure.

## **Rationale**

'Mathematics is essential to everyday life, critical to science, technology and engineering and necessary for financial literacy and most forms of employment. A high quality mathematical education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the power and beauty of mathematics, and a sense of enjoyment and curiosity about the subject.' (DfE 2013)

As can be seen from the above introduction, mathematics pervades all aspects of our lives and helps us to make sense of our world. With this in mind this policy promotes the basic and wider understanding of mathematics, and hopes to instil an enjoyment in the subject by supporting children to engage with it and build upon their own understanding and promote further learning.

Learning skills are an important aspect of mathematics but such skills are only a means to an end, and should be taught and learned in a context that provides purpose and meaning

## **Our Vision**

At Haddenham St Marys CE School we aim to help our children become fluent in the fundamentals of mathematics, to reason mathematically by following a line of enquiry and solve problems by applying their mathematics to a variety of routine and non-routine problems. We are passionate about instilling a secure basic understanding of number and the confidence that every child can succeed in maths.

## **EYFS**

Maths is taught throughout the EYFS. There is a daily short maths whole class input (15-20mins), which focuses on the learning objectives for that week. The continuous provision activities are planned to enhance the development of the weekly objectives. Observations are made and levelled for each child each week against the main objective as well as any other mathematical areas covered. An 'objective led learning' approach has been adopted to engage all children in effective mathematical development.

## **KS1 Objectives (from the National Curriculum 2014)**

In KS1 the objectives in maths cover the areas of:

- Number - number and place value, addition and subtraction, multiplication and division and fractions
- Measurement
- Geometry - properties of shapes and position and direction
- Statistics

## **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
- fluency, reasoning and problem solving activities for all abilities
- developing a range of strategies for calculating and understanding that mathematicians select the

most appropriate and efficient strategy for the task.

- experiencing mathematics inside and outside the classroom

Each class teacher is responsible for the mathematics in their class in consultation with and with guidance from the mathematics subject leader and senior leadership. In KS1 there is a daily lesson of between 45 and 60 minutes for mathematics. Planning is monitored by the mathematics subject leader. Teaching in the Foundation Stage is based on objectives set out in the Early Years Framework

### Mastery

At Haddenham St Marys CE School, we aim to teach maths for mastery. When taught to master maths, children develop their mathematical fluency without resorting to rote learning and are able to solve non-routine maths problems without having to memorise procedures.

- Evidence-based approach to teaching maths
- Helps pupils develop a deep, long-term and adaptable understanding of maths
- Inclusive approach where all children achieve
- Revisiting and consolidation which results in greater progress
- Reflected in the 2014 English national curriculum for mathematics
- Endorsed by the Department for Education, National Centre for Excellence in the Teaching of Mathematics (NCETM) and OFSTED

When teaching maths for mastery, the whole class moves through topics at broadly the same pace. Each topic is studied in depth and the teacher does not move to the next stage until the children demonstrate that they have a secure understanding of mathematical concepts.

Students are given time to think deeply about the maths and really understand concepts at a relational level rather than as a set of rules or procedures. This slower pace leads to greater progress because it ensures that students are secure in their understanding.

Teaching maths for mastery is different from 'traditional' maths teaching because it offers all pupils access to the full maths curriculum. This inclusive approach, and its emphasis on promoting multiple methods of solving a problem, builds self-confidence and resilience in pupils.

Though the whole class goes through the same content at the same pace, there is still plenty of opportunity for differentiation. Unlike the old model, where advanced learners are accelerated through new content, those pupils who grasp concepts quickly are challenged with rich and sophisticated problems within the topic. Those children who are not sufficiently fluent are provided additional support to consolidate their understanding before moving on. The teachers use White Rose to support the planning for mastery as well as the NCETM documents for greater depth.

Plus One and RM Easimaths are interventions for those with SEN in maths/those not achieving expected levels.