

# Haresfield C of E Primary School



## MATHS POLICY

### Rationale

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. 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.

### Aims

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

At Haresfield we aim to:

- To set challenging targets with high expectations for all pupils
- To offer a variety of approaches to teaching and learning to engage and motivate pupils and demand their active participation
- Ensure that children are taught through a smooth progression to use and apply mathematical skills in practical tasks and in solving real life problems
- Encourage children to select the appropriate materials and methods, to try different approaches and to organise their own work, devising and refining ways of recording.
- Give pupils opportunities to talk about and explain their mathematics.

### Delivering the Curriculum.

The teaching of maths at Haresfield is based on the National Curriculum for Maths.

*The national curriculum for mathematics aims to ensure that all pupils:*

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.'

## Teaching methods and approaches

The teaching of maths at Haresfield provides opportunities for:

- Group work
- Paired work
- Whole class teaching
- Individual work

During maths lessons pupils may be engaged in:

- The development of mental strategies
- Written methods
- Practical work
- Investigational work
- Problem- solving
- Mathematical discussion
- Consolidation of basic skills and routines
- Some recording of work in maths books or in other ways although it must be stressed that not all maths sessions will include written work.

It is important that maths lessons in Haresfield take into account the needs of individual pupils. Work set should be challenging, motivating and appropriately differentiated. Those children with a SEN 'my plan' should be given support in the classroom which could be in the form of extra resources or help from a T.A. Those children who are working at a level beyond that expected for their age group should also be identified and extended. Systems are in place that enable liaison with a local secondary school and there is a degree of flexibility within year groups where it is deemed appropriate to move children.

## Planning

Planning is undertaken at three levels:

**Long term** planning is based on the yearly teaching programmes set out in the National Curriculum.

**Medium term** planning is carried out half-termly. These plans, developed in consultation with a member of the maths advisory team, show the weekly objectives to be covered across the mixed year groups along with mental and oral starters to be covered during that week. At Haresfield 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. It is our intention that a similar scheme of work is developed for the Foundation Stage.

**Short term** planning is carried out weekly. These plans include learning objectives for the mental oral starter and the main activity, resources to be used, any differentiation, key vocabulary and key questions.

The medium and short term planning is collected and monitored by the maths co-ordinator and head teacher.

Maths is taught as a separate subject but every effort is made to link maths with other areas of the curriculum through the creative curriculum and topics. We try to identify the mathematical possibilities across the curriculum at the planning stage. We draw the children's attention to the link between maths and other curricular work so that children can see that maths is not an isolated subject.

#### Assessment, recording and reporting.

Assessment of the Key Objectives will be carried out in line with the assessment and reporting policy. Notes on the weekly planning carried out by teachers will help to assist in this and it is the responsibility of the class teacher to keep the assessment files updated regularly at a time appropriate for the class eg at the end of a unit of work or half termly.

#### Children's Targets

A list of progressive targets covering the objectives throughout the Key Stages are to be used by teachers and set as appropriate. The children are involved in setting their own targets and through reflective time in class self assess their progress through the targets. Each child's progress through the targets is shared with their parents at the end of term. These targets correlate with year groups and half term plans.

#### Using Data

The data collected from class assessments, the Foundation Stage Profile, SATS in Key Stages 1 and 2, and that from the optional QCA tests carried out in years 3, 4 and 5 will be analysed by the maths coordinator to assist in highlighting areas where difficulties are occurring and to see if patterns and trends are evident throughout the school.

Parents will receive a written report annually, informing them of their child's effort and progress in maths throughout the year and, for KS1 and KS2 children, stating pupils level of achievement. At the end of Key Stage 1 and 2 the results in SATS Tests will also be provided.

#### Homework

Children will be given a range of tasks to complete at home in line with the homework policy for each year group and to support work in school.

#### Equal Opportunities

We follow the principles of equal opportunities when teaching maths at Haresfield

Signed : \_\_\_\_\_

Date : \_\_\_\_\_

Review Date : \_\_\_\_\_