



## Lees Hill C of E Primary School

### Mathematics Policy

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**POLICY ADOPTED BY FULL GOVERNING BODY: May 2019**

**Name:** Mary Alston

**Position:** Chair of Governors

**Next Review Date:** May 2021

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#### **INTRODUCTION**

This policy outlines the teaching, organisation and management of the mathematics taught and learnt at Lees Hill C of E primary school. This policy is based on the National Curriculum. The policy has been drawn up as result of staff discussion and has full agreement of the Governing Body. The implementation of this policy is the responsibility of all the teaching staff.

#### **The Nature of Mathematics**

Mathematics is a 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 (2014) and the Abacus Maths scheme, 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 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.

#### **TEACHING MATHEMATICS**

##### **Teaching Time**

To provide adequate time for developing numeracy skills each class teacher will usually provide 5 mathematics lessons per week. This may vary in length but will usually last for about 45 to 60 minutes. Additional mathematics may be taught within other subject lessons when appropriate.

Teachers of the Reception children base their teaching on objectives in the Framework for Reception; this ensures that they are working towards the 'Early Learning Goals For Mathematical Development'. Towards the end of Reception teachers aim to draw the elements of a daily mathematics lesson together so that by the time children move into year 1 they are familiar with the 45-60 minute lesson.

##### **Class Organisation**

From year 1, all pupils will have a dedicated daily mathematics lesson at least 4 days per week. Within these lessons there will be a good balance between whole-class work, group teaching and individual practice.

##### **A Typical Lesson**

A typical 45 to 60 minute lesson in year 1 to 6 will be structured like this:

- Oral work and mental calculation. This will involve whole-class work to rehearse, sharpen and develop mental and oral skills.
- The main teaching activity. This will include both teaching input and pupil activities and a balance between whole class, grouped, paired and individual work.
- A Plenary. This will involve work with the children to sort out misconceptions, identify progress, to summarise key facts and ideas and what to remember, to make links to other work and to discuss next steps.

### **Links Between Mathematics and Other Subjects**

Mathematics contributes to many subjects within the primary curriculum and opportunities will be sought to draw mathematical experience out of a wide range of activities. This will allow children to begin to use and apply mathematics in real contexts.

## **SCHOOL AND CLASS ORGANISATION**

### **How We Cater For Children Who Are More Able**

For the majority of the week the more able children at mathematics will be taught with their own class and stretched through differentiated group work and extra challenges. When working with the whole class, teachers will direct questions towards the more able (at their ability level) to maintain their involvement. Due to the size of our school, various arrangements will be made to meet the individual learning needs of children.

### **How We Cater For Pupils With Particular Needs**

The daily mathematics lesson is appropriate for all pupils. Teachers will involve all pupils through differentiation and adaptation.

### **Pupils With Special Educational Needs And Individual Education Plans**

Within the daily mathematics lesson teachers aim to provide activities to support children who find mathematics difficult. Children with SEND are taught within the daily mathematics lesson and are encouraged to take part when and where possible.

Where applicable children's IEPs incorporate suitable objectives from the end of year expectations and teachers keep these objectives in mind when planning work.

When educational support staff are available to support groups or individual children they work collaboratively with the class teacher. The support teacher feeds back to the class teacher when appropriate to inform evaluations, assessment and future planning.

### **Pupils Records of Their Work**

There are occasions when it is not appropriate or necessary to record mathematics in a permanent form, but there are also occasions when it is both quick and convenient to carry out written calculations. It is also important to record aspects of mathematical investigations. 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 and these are used to support their written work.

Recording work may involve children making rough jottings first followed by recording actual answers for the teacher's attention. All children are encouraged to work tidily and neatly when recording their actual answers but jottings may take any form and are important evidence for the teacher.

### **Resources**

The classes in both KS1 and KS2 have the majority of the necessary mathematics equipment located within the classrooms.

## **Information and Communication Technology**

ICT will be used in various ways to support teaching and motivate children's learning. ICT will involve the computer, calculator, and audio-visual aids. They will however only be used in the daily mathematics lesson when it is the most efficient and effective way of meeting the lesson objective.

## **Assessment**

Assessment will take place at three connected levels: short-term, medium-term and long-term. These assessments will be used to inform teaching in a continuous cycle of planning, teaching and assessment.

Short-term assessment will be an informal part of every lesson. The teacher will share the objectives for the lesson with the children and make sure they are clear what is being expected of them to successfully achieve the objective. This is a necessary part of assessment for learning and helps the children take ownership for their own learning. The short term assessment will also involve the teacher checking the children's understanding at the end of the session to inform future planning and lessons.

Medium-term assessment will take place at the end of each half term.

Long-term assessment will take place annually using the Abacus resources. The first assessment at the end of January, a summative test will be given. The second assessment will take place towards the end of the school year to assess and review pupils' progress and attainment. These will be made through compulsory new National Curriculum mathematics tests. Year 1 children will be teacher assessed against the end of year expectations. Teachers will also draw upon their class record of attainment against key objectives and supplementary notes and knowledge about their class to produce a summative record. Accurate information will then be reported to parents and the child's next teacher. For Y2 and Y6 children this will be SATS, for Y1, Y3, Y4 & Y5 this will be teachers assessments informed by all assessors.

## **MANAGEMENT OF MATHEMATICS**

### **Role of the Co-ordinator**

- Ensure teachers are familiar with the content of the maths curriculum and help them to plan lessons;
- Lead by example in the way they teach in their own classroom;
- Prepare, organise and lead INSET, with the support of the Headteacher;
- Observe colleagues from time to time with a view to identifying the support they need;
- Attend INSET provided by outside agencies;
- Inform parents;
- Inform governors

### **Role of the Headteacher**

- Lead, manage and monitor the implementation of the National Curriculum, including monitoring teaching plans and the quality of teaching in the classrooms;
- Keep the governing body informed about the progress of the curriculum;
- Ensure that mathematics remains a high profile in the school's development work;
- Deploy support staff to maximise support for the framework.

### **Monitoring and Review**

This policy is to be reviewed every two years or sooner if required.

