



*Work, play, pray - together*

St Mary's RC Primary School

## Mathematics Policy

Approved:

Review date:

# Mathematics Policy

## Rationale

At St Mary's RC Primary School, we aim to provide the best possible education for each child within the context of a caring Christian community. Mathematics is taught as part of a broad and balanced curriculum, which will enable each child to develop confidently and achieve to the best of his/her ability.

## Aims and Objectives

The National Curriculum for mathematics aims to ensure that all pupils:

- become **fluent** in the fundamentals of mathematics, including 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.

## Organisation

In order to achieve the above aims, teachers devise plans drawing upon the National Curriculum and Early Years Foundation Stage materials. Various written resources and books are used but the main planning/teaching structure is taken from the Abacus materials. Each daily maths lesson will incorporate a mental activity as well as the teaching and practise of maths skills. Weekly investigation lessons will be taught in each class.

When teaching mathematics we provide opportunities for:

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

Pupils are involved in:

- The development of mental strategies
- Written methods
- Practical work

- Investigational work
- Problem solving
- Mathematical discussion
- Consolidation of basic skills and number facts
- ICT opportunities

Mathematics contributes to many subjects and it is important the children are given opportunities to apply and use Mathematics in real contexts across the curriculum.

### **Inclusion**

At our school we teach maths to all children, whatever their ability. Mathematics forms part of the school curriculum policy to provide a broad and balanced curriculum to all children. Through our mathematics teaching we provide learning opportunities that enable all pupils to make progress. We do this by ensuring the activities are differentiated but challenging for each child's needs. Marking and assessments help us to consider each child's attainment and progress and to plan future lessons appropriately.

### **EYFS**

We teach mathematics in our Reception Class. The children follow the Early Years Foundation Stage, in which there is the area of learning entitled 'Mathematics'. At this age, children are provided with opportunities to develop and improve their skills in counting, understanding and using numbers, calculating simple addition and subtraction problems; and to describe shapes, spaces, and measures. They are given opportunities to explore numbers, measures, patterns, shapes and space through a variety of practical activities, using both the indoor and outdoor classrooms. They are encouraged to talk about and enjoy all aspects of mathematics.

### **Role of Subject Leader**

The role of the subject leader is to oversee the implementation and delivery of the Mathematics curriculum and to ensure there is progression from year group to year group. They should offer expertise and guidance to other staff members. Where appropriate they will lead staff meetings on mathematics or offer advice on in-service training which will be in-line with the School Development Plan. The leader is also responsible for the requisition of resources required for the teaching of mathematics. This will be within the confines of the school budget.

### **Role of the teacher**

The class teacher is responsible for planning and delivering the Mathematics curriculum for the children within their class, liaising with the co-ordinator when necessary. Teachers will ensure progression in the acquisition of mathematical skills with due regard to the National Curriculum for Mathematics and our school's calculation policy (see Mathematics – Written Calculation Policy). They will liaise with colleagues within school, pre-school providers and colleagues in secondary education to ensure the provision is appropriate.

Teachers will continue to develop and update their skills, knowledge and understanding of mathematics through appropriate CPD training. Throughout each year, it is the class teachers' responsibility to inform parents of pupils' progress, achievements and attainments in mathematics either through verbal feedback or in the form of a written report. It is also the teacher's responsibility to carry out pupil assessments and keep record of their progress (see Assessment Policy).

### **Role of Support Staff**

Support staff will work with small groups of children or individuals needing assistance to promote and enhance their learning as directed by the class teacher. Teaching assistants will liaise closely with the teacher to monitor the children's progress and will make notes and observation records as necessary. The support staff will have access to and follow daily plans, class intervention plans and any One Plans, which outline the delivery of the curriculum for groups and individuals.

### **Parental and Community Involvement**

Parents have a vital role to play and the school seeks to work in partnership with parents. Parents are encouraged to help their child with Mathematics homework activities and to feedback in the home/school link books as appropriate. They are invited into school during the Autumn and Spring terms to discuss the progress of their child with the class teacher. In the Summer term they are invited in to collect the yearly written report and look at their child's work. If significant changes have been made to the mathematics curriculum, curriculum evenings or workshops are held for parents to keep them informed. Parents are also welcome to help with mathematics lessons in classrooms.

### **Cross- Curricular**

As well as teaching specific maths skills, the children need to understand how these relate to real life situations to make them meaningful. We offer opportunities for the children to use mathematical

skills in different contexts across the primary curriculum. We also aim to teach children about the importance of economic well-being, through a variety of different tasks and activities. Spiritual, Moral, Social and Cultural (S.M.S.C.) aspects are addressed through the teaching of maths as recorded on medium term plans.

### **ICT**

Children will use ICT programmes and websites to reinforce and develop their mathematical understanding. Programmes will allow opportunities for the children to work together to talk through specific mathematics problems and find solutions. They will also use their maths skills when working with databases and spreadsheets. When teachers see fit, homework activities will be set online via children's Abacus account.

### **Classrooms and Resources**

The classrooms should be organised appropriately to ensure the environment is stimulating and promotes mathematics. A learning wall and displays should be used to support mathematical concepts and reinforce teaching points. These should be changed regularly. Each classroom has a designated unit for maths resources. These should be kept orderly and be clearly labelled so that the children can access them independently. Larger mathematics resources for whole school use are kept in the resource room.

### **Assessment and Record Keeping**

Assessment is regarded as an integral part of teaching and learning and is a continuous process so that appropriate teaching strategies can be used. It is the responsibility of the class teacher to assess all pupils in their class, but peer and self-assessment are also equally important.

In the Early Years Foundation Stage, assessments and observations of the children's skills and understanding are made. The children are assessed against the early learning goals at the end of the Reception year. At the end of Key Stage 1, the children are assessed on their mathematics skills through tests and tasks. These outcomes are reported to the LEA and to parents. At the end of Key Stage 2, the children complete statutory tests for maths. These outcomes are reported to the LEA, to parents and to the secondary schools. The results from any non-statutory mathematics test taken in Year 3, 4 and 5 are used for target setting and monitoring progress.

All children have equal access to the curriculum regardless of their gender or background. This is monitored by analysing pupil performance throughout the school to ensure that there is no disparity between groups.

### **Homework**

Homework is used to support mathematics. All children have access to their own Abacus account, where the class teacher can allocate homework linked to the work carried out in class. Other mathematical homework tasks are set to extend and reinforce the learning carried out in school and help to build their fluency in maths skills. Homework tasks will be set to meet the individual needs of the child.

### **Promoting Racial Equality**

We aim for children to develop respect and concern for, and an interest in people throughout the world regardless of culture, race or religion. We hope that they will gain a greater understanding of the economic status and way of life of different cultures.

### **Monitoring**

The implementation of this policy will be monitored by the Head teacher, co-ordinator and governing body.

### **Evaluation and Review**

The Mathematics policy of the school is regularly evaluated and updated in line with the Curriculum Policy and the School Development Plan.