



## **MORGANS PRIMARY SCHOOL AND NURSERY**

### **MATHEMATICS POLICY**

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#### **INTRODUCTION**

This policy outlines the teaching, organisation and management of the mathematics taught and learnt at Morgans Primary School. The school's policy for mathematics is based on 'The Renewed Framework for teaching mathematics from Reception to Year 6 (2006)'. This policy has been drawn up by the maths coordinators and agreed by all staff. The implementation of this policy is the responsibility of all the teaching staff.

#### **OUR AIMS**

For all children to be confident, competent mathematicians who are able to think mathematically and select and use the mathematics they need in real life situations.

We aim to:

- Promote a love of mathematics through enthusiastic teaching, a variety of classroom approaches and creating an environment that will stimulate curiosity, questions, predicting, initiative and flexibility when approaching tasks;
- Recognise the importance of learning through play and first hand experiences;
- Promote mathematics across the curriculum;
- Instil an ability to solve problems, to reason, to think logically and to work systematically and accurately;
- Encourage children to work independently and in cooperation with others;
- Develop an ability to communicate mathematics;
- Provide access to a well resourced environment;
- Provide a breadth of structured learning activities leading to a progressive development of mathematical concepts and skills in line with the Primary Framework for Mathematics.

## **ORGANISATION**

All children are taught mathematics in their class group with a range of different abilities. Year 6 are split into two sets across the Year group according to their ability.

### **Teaching time**

To provide adequate time for developing numeracy skills each class teacher will provide at least 4 daily mathematics lessons per week. This may vary in length but will usually last for about 45 – 60 minutes. Additional mathematics may be taught within other subject lessons when appropriate.

Teachers in the Foundation Stage base their teaching on 'Ages and Stages', which ensures that they are covering the objectives from the Foundation Stage Profile.

The beginning of Year 1 is a transition stage between the Foundation Stage profile and the Primary Framework, moving on as and when the children are ready.

## **LESSON ORGANISATION**

Lessons will consist of:

- Oral Mental Starter – whole class work to revise, develop and improve speed of recall of mental maths and oral skills
- Main Teaching Activity – both teaching input and pupil activities and a balance between whole class, grouped, paired and individual work.
- Plenary – work with the whole class 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. Some of the links between mathematics and other subjects are identified as follows:

- Science – estimation, measurement, data handling
- History – passage of time, time lines
- Geography – maps and routes, data handling, coordinates
- PE – shape, movement, scoring, timing, sequencing, patterns
- Technology – proportion, measurement, scales
- ICT – data handling, shape
- RE – shape patterns, passage of time, timelines
- Music – time, counting, patterns, groups of 3, 4 etc.
- Art – shape, pattern

## **ADDRESSING THE NEEDS OF ALL CHILDREN**

The daily mathematics lesson is appropriate for all pupils. Teachers will involve all pupils through differentiation and a variety of teaching styles.

More able children in mathematics are taught with their own class and stretched through differentiated group work and extra challenges. Teachers will direct questions towards the more able (at their ability level) to maintain their involvement. (See Gifted and Talented Policy for further details)

Children with SEN are taught within the daily mathematics lesson and are given learning activities appropriate to their own level.

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.

Intervention strategies are put in place for identified underachieving children, such as Government funded one to one tuition, Every Child Counts and Spring Board.

## **PUPILS RECORDS OF THEIR WORK**

Maths books for recording their learning are introduced at the end of Year1, however there are occasions when it is not necessary to record mathematical learning. 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.

## **MARKING**

In line with our current marking policy

## **HOME LEARNING**

Each child is given a regular suggested home learning activity, in line with the school's home learning policy.

## **RESOURCES**

We have a wide range of good quality resources, which is continually audited and updated. Some resources are kept in teacher's classrooms and some are stored centrally for KS1 and KS2.

Schemes of work available for use include:

Star Maths Starters (IWB)

Maths Whiz (IWB)

Folens

100 Numeracy Hours

Scholastic

## **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 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.

Teachers assess children's learning and progress using the 'Assessing Pupil Progress' (APP) materials. The results of these assessments are also recorded on Classroom Monitor. This is used to update the children's levels from Year 1 to Year 6 three times a year, which are reported to the assessment coordinator.

Teachers use Star Maths Assessment Tests at the end of each block of teaching. They analyse the results and use this to inform their future planning. The analysis is also shared with the maths coordinators.

Optional SATs tests are carried out to inform teacher assessments.

Levels will be reported to parents in Year 2-6 and more detailed assessments will be given to the child's next teacher.

## **MANAGEMENT OF MATHEMATICS**

### **ROLE OF THE CO-ORDINATOR**

- Ensure teachers are familiar with the framework, current issues and requirements;
- Prepare, organise and lead appropriate INSET;
- Work co-operatively with the SENCO;
- Observe colleagues from time to time with a specific focus
- To support colleagues and share good practice as and when necessary;
- Attend INSET provided by LA numeracy consultants;
- Provide information for parents;
- Regularly discuss the progress of the subject in the school with the head teacher and numeracy governor.
- To manage the budget and ensure that the school is well equipped to teach mathematics.
- Review the policy regularly
- Monitor practise and standard of achievement through agreement trialling, observation, and review.

### **ROLE OF THE NUMERACY GOVERNOR**

- To visit the school regularly to talk with the teachers and when possible, observe some of the daily mathematics lessons;
- To report back to the curriculum committee on a regular basis;
- To attend any relevant inset or training.

### **ROLE OF THE HEADTEACHER**

- Lead, manage and monitor the implementation of the framework, including monitoring teaching plans and the quality of teaching in the classrooms;
- With the Numeracy governor, keep the governing body informed about the progress of mathematics;
- Ensure that mathematics remains a high profile in the school's development work;
- Deploy support staff to maximise support for mathematics;
- To inform coordinators and staff of new and planned intervention strategies for mathematics.