

## Wootton Bassett Infant School

### Mathematics Policy

#### **Introduction**

This policy document sets out the school's aims, principles and strategies for the delivery of mathematics.

#### **Rationale**

Mathematics teaches us how to make sense of the world around us through developing a child's ability to calculate, to reason and to solve problems. It enables children to understand and appreciate relationships and pattern in both number and space in their everyday lives. It forms an essential element of communication and as their knowledge and understanding grows it enables them to analyse and communicate information and ideas.

#### **Aims**

- Develop a confident, positive attitude towards the learning and use of mathematics making it an enjoyable experience.
- Promote confidence and competence with numbers and the number system.
- Develop mental strategies and the ability to explain their methods using correct mathematical terms.
- Develop the ability to solve problems through decision-making and reasoning in a range of contexts.
- Develop a practical understanding of the ways in which information is gathered and presented.
- Explore features of shape and space and develop measuring skills in a range of contexts.
- Understand the importance of mathematics in everyday use.

#### **Teaching and Learning**

The school uses a variety of teaching and learning styles in Maths lessons. Each lesson has a high proportion of whole-class and group-direct teaching. During these lessons we encourage children to ask as well as answer questions using

STEM sentences which are progressive from EYFS to Year 2. Children have the opportunity to use a wide range of manipulatives to support their work.

Wherever possible, we encourage children to use and apply their learning in everyday situations. We provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this through a range of strategies - in some lessons through differentiated group work and in other lessons by organising the children to work in pairs on open-ended problems or games. We use teaching assistants wherever possible to support some children and to ensure that work is matched to the needs of individuals.

### **Curriculum Organisation**

Foundation Stage - Mathematics is taught through first hand, practical activities. These are carried out in both the indoor and outdoor environment, within an integrated, predominantly topic-based curriculum. The objectives are set out in accordance with Development Matters (2021) in the early years. Mathematical activities take place in a variety of situations, which include small group and individual activities, some whole class teaching, as well as making resources available to encourage independent, child initiated learning opportunities and problem solving. The group and individual activities are differentiated to take into account the group/child's current stage and learning needs. Children will record number formation and demonstrate their understanding of numbers from 1-10 in a booklet. They will start to record Mathematics more formally in a book in preparation for Year 1 in Term 6.

Key Stage 1 - Mathematics is a core subject in the National Curriculum (2014) and we use this as the basis for implementing the statutory requirements of the programme of study for mathematics.

NCETM guidance and materials has been adopted as an integral structure to enhance the teaching and skills of mathematics. Additional levels of differentiation are planned if necessary. The use and application of mathematics to investigate and solve problems is integrated with work on number, algebra, shape, space and data handling to ensure that we meet all legal requirements and to help children think creatively.

Children will record their work in a range of ways; Mathematics Book, folder of work and by taking photographs.

All classrooms are well resourced with equipment suitable for that year group.

### **Cross Curricular Links**

The teaching of mathematics can be linked across the curriculum with other subjects. It can be used in different situations so that children may see its relevance and application to problems in the outside world.

The computer is a valuable resource in mathematics lessons to support teaching and learning and to motivate children. If it is the most efficient and effective way to meet objectives IT will be used by teachers and children. This will include the use of maths software, interactive whiteboard and specific internet sites.

### **Equal Opportunities**

The teaching of mathematics will be in the accordance with the present policy for Equal Opportunities. We aim to provide equal access to mathematics for those children with special educational needs and those pupils who are very able and require extension activities.

Intervention programmes that the school provide are: Numbers Count and Numicon. In some circumstances teachers may plan and provide interventions based on the misconceptions and needs of the child/ren.

### **Assessment**

Assessment will take place from three aspects, long term, medium term and short term. These will be used to inform teaching and planning. Short term assessments will be an informal part of every lesson to check pupils understanding and give information for future objectives. Medium term assessments will take place each term (x6) to assess the understanding of key objectives covered. Activities and outcomes are kept and recorded in sample work books. Long term assessments will take place towards the end of the school year to assess levels of attainment so this information can be forwarded to the next teacher and reported to parents. INSIGHT online is used as the schools tracking system.

In the Foundation Stage:

As with Key Stage 1 short term assessments will be an informal part of the every lesson. Foundation Profiles will be carried out each term and medium term assessments will take place at the end of each term and outcomes recorded in Sample of Work books. Profile Stage results will be passed on to the next teacher at the end of the year. Data is inputted on the INSIGHT system

### **Role of the Subject Leader and Head Teacher**

- Lead, manage and monitor the implementation of the Mathematics Curriculum, including monitoring the quality of teaching and learning.
- To review and analyse assessment data and keep the Governing Body informed about the progress and assessment in Mathematics.
- To be enthusiastic about mathematics and demonstrate good practice.
- To keep up-to-date by attending courses, giving feedback and delivering INSET where necessary.