

## Mathematics at Rivenhall C of E Primary School

### **Intent:**

Mathematics is a skill we use on a daily basis and is an essential part of everyday life. Therefore, mathematics forms an important part of our broad and balanced curriculum where we endeavour to ensure that children develop an enjoyment and enthusiasm for maths that will stay with them throughout their lives and empower them in future life. We believe that unlocking mathematical fluency is an essential life skill for all learners and is a pre-requisite to being able to reason and solve problems mathematically.

One of our key curriculum drivers is *'enabling learning'*.

In order to achieve this, we will:

- Ensure that all pupils have access to a broad, balanced, relevant, challenging and well taught curriculum which will give them the experiences, skills and knowledge to be successful both now and in the next stage of their curriculum and in their future lives.
- Enable children to calculate efficiently, developing mental and written methods of calculation which they understand and use correctly.
- Enable children to apply their mathematical knowledge to solve increasingly complex problems.
- Develop the skills of mathematical reasoning; enabling children to follow a line of enquiry, identify relationships, make generalisations, and to develop an argument, justification or proof using mathematical language.
- Make links between the different areas of mathematics and between other curriculum subjects.
- Foster a curiosity in mathematics and promote enjoyment of the subject.

### **Implementation:**

#### **The School Provision**

Rivenhall School follows the National Curriculum for Mathematics as outlined in the programmes of study for mathematics. An overview of the areas of the mathematics curriculum covered in each year group is available on the school's website. Early Years follow the White Rose Scheme of Learning for Reception. Key Stage One follow the White Rose Schemes of Learning (version 2.0) for the individual year groups. Key Stage two base their learning on the White Rose Schemes of Learning for mixed age classes (version 2.0). These schemes identify the areas of Maths to be taught in each term, detailing the learning objectives for each year group, and provide examples of fluency, reasoning and problem-solving questions which can be used.

Early practical, oral and mental work lay the foundations by providing children with a good understanding of how the four operations build on efficient counting strategies and a secure knowledge of place value and number facts. Later work ensures that children recognise how the operations relate to one another and how the rules and laws of arithmetic are to be used and applied.

In addition to the school's Mathematics Policy there is a separate 'Written Calculations' policy which details how written methods for the four rules of number are taught across the school. This policy shows how written calculations for each of the four rules of number – namely addition, subtraction, multiplication and division – are taught in our School. It outlines how children will be taught to progress from informal written methods, derived from mental calculation strategies, to efficient written methods. It is essential that all children understand the methods being taught, rather than just applying a formula without understanding why it works.

In addition, the school uses Abacus maths as a tool to assist teachers in delivering the curriculum. This scheme also provides all children in Years 1 to 6 with access to interactive ICT games, at an appropriate level, for home learning.

## **Organisation of Mathematics teaching**

The school has an EYFS/Year 1 class, a Year 1/2 class, a Year 3/4 class and a Year 5/6 class. Maths is taught in each class by the class teacher.

All children in Key Stages 1 and 2 have a daily Maths lesson. Each class holds an additional 'Maths Meeting' of 5 to 10 minutes each day outside of the usual maths lesson, to consolidate the skills of mental maths, such as rapid recall of number bonds and times tables, and to reinforce and revise other areas of mathematical learning.

The school recognises the importance of children learning their times tables. Years 1 to 6 use 'Fast Maths' to increase the speed of mental calculation. This is delivered in blocks of approximately six weeks at a time, with further opportunities given to allow children to consolidate their skills between blocks. A times tables passport scheme has been introduced in school to further encourage children to learn their tables.

The school places particular emphasis on the need to ensure Maths lessons are enjoyable and relevant. Opportunities are provided for practical activities and the needs of all learners are considered. Practical resources such as hundred squares, number lines, dienes, Numicon, place value cards and coins are used throughout the school to help consolidate children's understanding. Each year a special maths week is organised.

Teaching Assistants are used to support children of all abilities within Maths lessons as appropriate. Some children receive additional support outside of the maths lesson.

### **Impact:**

Throughout each lesson formative assessment takes place and feedback is given to the children through verbal feedback, marking and where appropriate next step tasks. Future planning is informed by this assessment, as well as by curricular targets, and individual/group needs are evaluated and catered for.

Maths teaching and learning is monitored by the Subject Leader and the SLT team. This includes use of book scrutinies, formal and informal lesson observations, pupil and staff voice and analysis of data.

At the end of each term Years 3, 4 and 5 use the termly maths tests produced by NFER which enable us to generate standardised scores to help monitor the progress of individual students and cohorts. Years 2 and 6 use previous SATs papers which also generate standardised scores.

In the final term of EYFS, each child's level of development is assessed against the Early Learning Goals. These judgements are based on ongoing teacher assessments and observations throughout the year.