



## **St. Ethelbert's RCP School** **Mathematics Policy**

*Love, Care, Share...*

*Love learning as friends;*

*Care for our community as neighbours;*

*Share our faith in Jesus as disciples.*

### **Introduction**

This policy outlines our curriculum intent in respect of pupils' mathematical education. It also describes our agreed approach to the planning, delivery and assessment of the mathematics curriculum. The mathematics taught and the methods used reflect the recommendations outlined in the guidance contained in the National Curriculum for Mathematics. It provides information and guidance for teachers, governors and other interested parties.

### **Aims**

The national curriculum for mathematics aims to ensure that all pupils:

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

At St Ethelbert's R.C. Primary School, it is recognised and taught that Mathematics helps children to make sense of the world around them, through developing their ability to calculate, to reason and to solve problems, whilst expressing their reasoning fluently. It enables children to understand and appreciate relationships and patterns in both number and space in their everyday lives. Through their growing knowledge and understanding, children learn to appreciate the contribution made by many cultures to the development and application of mathematics.

We are seeking to further improve our standard of Maths education by providing high quality textbooks, teaching resources and professional development.

In conjunction with the National Curriculum, we aim to:

- develop a positive attitude to maths as an interesting and attractive subject, in which all children gain some success and pleasure.
- encourage the effective use of maths as a tool in a wide range of activities within school and, subsequently, in adult life.
- develop the children's ability to express themselves fluently and to talk about the subject confidently, using correct mathematical language and vocabulary.
- develop an appreciation of relationships within maths.
- develop the ability to think clearly and logically with independence of thought and flexibility of mind.
- use manipulatives to aid the development and learning of the children in mathematics.
- use the CPA (Concrete, Pictorial and Abstract) approach to developing mathematical skills.
- develop an appreciation of creative aspects of maths and awareness of its aesthetic appeal.
- develop mathematical skills and knowledge and quick recall of basic facts in line with National Curriculum recommendations.

### **Teaching and Learning Style**

The school follows the National curriculum for mathematics. Links are made to other subjects where possible, or appropriate. The school uses a variety of teaching styles to cater for the learning styles of pupils in mathematics lessons. Our principle aim is to develop children's knowledge, skills, reasoning, fluency and understanding in mathematics. We do this through a daily lesson that has a high proportion of whole-class teaching, which relies on precise and incisive questioning by teachers and resilient speculation, reflection and problem solving by children. During these lessons, we encourage children to ask as well as answer mathematical questions. In Key Stage 2, one lesson per week is given over to the teaching of arithmetic; a short arithmetic test and times table grid are completed by the children each week.

Children have the opportunity to use a wide range of resources such as number lines, counters, number squares, Numicon, place value mats, digit cards, Base 10 apparatus, ICT, LBQ and measuring apparatus.

### **Remote Learning:**

In the event of a school closure, remote learning will be provided via the Seesaw platform and through video lessons. Wherever possible, remote education will align as closely as possible with our in-school provision, providing breadth, balance and progression, using the White Rose scheme as the principal resource.

### **Adapting Teaching to Meet the Needs of Children**

In the revised national curriculum 2014 it is suggested that:

*Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.'*

## **Attainment targets**

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study. The school aims to provide opportunities for children to develop these skills, but for those children who are exceeding the appropriate relevant programme of study they are not to move onto the next programme of study. They are to master their current one with an emphasis on depth and challenge rather than accelerating through the content.

## **Mathematics Curriculum Planning**

Mathematics is a core subject in the National Curriculum, and we use the White Rose teaching sequence and resources as the basis for implementing the statutory requirements of the programme of study for mathematics. Where appropriate, this is supplemented by a variety of other resources including: Abacus Maths, Target Maths, Primary Stars and LBQ.

We carry out curriculum planning in mathematics in line with the structures and recommendations outlined in the National Curriculum. Our plans list the specific learning objectives for each lesson and give details of how the lessons are to be taught. They include key vocabulary and regular opportunities for reasoning and problem solving.

The head teacher and mathematics subject leader are responsible for monitoring the teaching and learning of Maths within our school.

## **Assessment**

The children's learning is assessed daily through teacher observation, marking and discussion with the children. Weekly, additional data is gained in Key Stage 2 by the administration of an Arithmetic and a times tables test. In addition, White Rose End of Block and End of Term assessments are used to support judgements. In Year 2 and Year 6, practice SATs papers may also be used to support teacher assessment. Tracking is completed on a termly basis.

## **Maths and Inclusion**

At St Ethelbert's R.C. Primary School, we teach Maths to all children, whatever their ability and individual need. Maths forms part of the curriculum policy to provide a broad and balanced education for all children. Maths interventions are carried out to ensure gaps in children's understanding are filled, this may take place as a pre-teach or following the lesson.

## **Additional Related Policies**

Calculation Policy, Curriculum Policy, Child Protection Policy, Equality Policy, and Marking Policy.

**Policy reviewed November 2022**