# **St James the Less RC Primary School**



# **Mathematics Policy**

Updated Autumn 2022



#### 1 Introduction

Mathematics is important in everyday life. It is integral to all aspects of life and with this in mind we endeavour to ensure that children develop a healthy and enthusiastic attitude towards mathematics that will stay with them.

This policy outlines what we are aiming to achieve in respect of pupils' mathematical education. It also describes our agreed approach to the planning, delivery and assessment of the mathematics' curriculum.

The National Curriculum (2014) for mathematics describes what must be taught in each key stage. The mathematics taught and the methods used reflect both the statutory requirements and the non-statutory guidance and recommendations outlined in the following documents:

- (A) The Revised Statutory Framework for the EYFS (2021)
- (B) The Development Matters in the EYFS (2021)
- (C) Mathematics Programmes of Study: key stages 1 and 2 National Curriculum in England (2013)
- (D) Mathematics Planning National Curriculum documentation Lancashire County Council (2013)
- (E) Red Rose Mastery programme

This policy provides information and guidance for staff, governors and other interested persons.

The aims of mathematics are:

 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
- 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

# 2 Teaching and learning style

The school uses a variety of teaching and learning styles in mathematics lessons. Our principal aim is to develop children's knowledge, skills and understanding in mathematics. We do this through a daily lesson that has a mental and oral starter, a whole class teaching input covering the learning objective, differentiated activities (individual, paired and group) and a plenary. During these lessons we encourage children to ask as well as answer mathematical questions. They have the opportunity to use a wide range of resources to support their work. When appropriate, children use ICT in mathematics lessons in order to enhance their learning. Wherever possible, we encourage the children to use and apply their learning in everyday situations.

In all classes there are children of differing mathematical ability. We recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child and give support where required.

#### 3 Scheme of work

In Years 1, 2, 3, and 4 our school has adopted the Red Rose scheme of work which follows the mastery approach to teaching and learning. Years 5 and 6 use the scheme of work produced by the Lancashire maths team and support this format with a range of other schemes i.e. Classroom Secrets . The scheme sets out the objectives to be taught in each year group on a week-by-week basis. The schemes ensure full coverage of the 2014 National Curriculum and build in continuity and progression throughout the school.

### 4 Mathematics curriculum planning

Mathematics is a core subject in the National Curriculum, and we use the Mathematics Programmes of Study: key stages 1 and 2 National Curriculum in England (2013) and the Mathematics Planning National Curriculum documentation – Lancashire County Council (2014) as the basis for implementing the statutory requirements of the programme of study for mathematics.

We carry out the curriculum planning in mathematics in line with the structures and recommendations outlined in the LCC medium term planning documentation. Our weekly plans list the specific learning objectives for each lesson and give details of how the lessons are to be taught.

The headteacher and mathematics subject leader are responsible for monitoring the mathematics planning within our school.

# 5 The Foundation Stage

Work undertaken within the Early Years Foundation Stage is guided by the requirements and recommendations set out in the Revised Statutory Framework for the EYFS (2021), the Development Matters in the EYFS (2021) and the Lancashire Planning Support Tools. We give all the children ample opportunity to develop their understanding of number, measurement, pattern, shape and space through varied activities that allow them to enjoy, explore, practise and talk confidently about mathematics.

# 6 Contribution of mathematics to teaching in other curriculum areas

Throughout the whole curriculum opportunities exist to extend and promote mathematics. All staff will promote diversity where appropriate, ensuring our diverse communities are accurately reflected and represented.

# 7 Teaching mathematics to children with special needs

Within the daily mathematics lesson teachers not only provide activities to support children who find mathematics difficult, but also activities that provide appropriate challenges for children who are high achievers in mathematics (AGT). When additional support staff are available to support groups or individual children they work collaboratively with the class teacher.

Children identified with special needs under "school action" have Individual Education Plans (IEP's).

### 8 Assessment and recording

Assessment has two main purposes:

- assessment of learning (also known as summative assessment);
- assessment for learning (also known as formative assessment).

At St James the Less Primary School we recognise that AfL lies at the heart of promoting learning and in raising standards of attainment. We further recognise that effective AfL depends crucially on actually using the information gained.

The school supports teacher assessment through the use of the Lancashire Learning and Progression Steps. These documents set out a progression of learning for individual strands of the National Curriculum towards end of year age related expectations.

The assessment procedures within our school encompass:

- Making ongoing assessments and responding appropriately to pupils during 'day-to-day' teaching. These 'immediate' responses are often verbal and are not always recorded;
- Using knowledge of pupils drawn from ongoing pupil tracking records and the progression document to inform 'prior learning' at the beginning of each unit of work to guide our planning and teaching;

- Adjusting planning and teaching within units in response to pupils' performance;
- Use of the Assessment questions within the Lancashire Interactive Planning tool (National Curriculum 2014) to check learning against the end of year objectives. If necessary future planning is adapted in response to assessment outcomes;
- Use of ongoing teacher assessment in order to identify gaps in attainment and at the end of each full term using this information to judge each child's attainment against year group expectations;
- Use of information gained from statutory and internal school tests. Analysis is done at both a quantitative and qualitative level. Information gained is used to identify the group's and individual's strengths and areas for improvement and also to determine which strategies or methods are particularly effective in respect of specific areas of mathematics (the how and why).

#### 9 Resources

There is a range of resources to support the teaching of mathematics across the school. Each class teacher has basic everyday resources within their classrooms. There are central resources available to all which are stored on the KS1 corridor. Each year group following the Red Rose scheme of work has the relevant resources for their class.

#### 10 Monitoring and review

Monitoring of the standards of children's work and of the quality of teaching in mathematics is the responsibility of the head teacher, SLT and mathematics co-ordinator. The work of the mathematics co-ordinator also involves supporting colleagues in the teaching of mathematics, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school.

The SLT undertakes lesson observations of mathematics teaching across the school as part of performance management, and with the mathematics co-ordinator reviews samples of children's work.

#### 11 Reporting to parents

Detailed reports are completed before the end of the summer term and parents are given opportunity to discuss their child's progress at parents' evenings. Data from statutory assessments is given to parents alongside the annual pupil report.

#### 12 Homework

See homework policy.