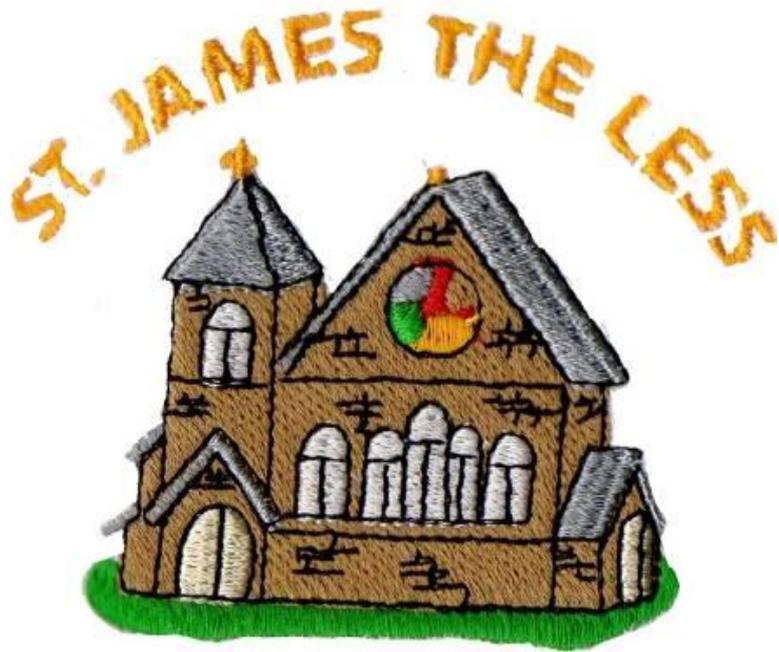
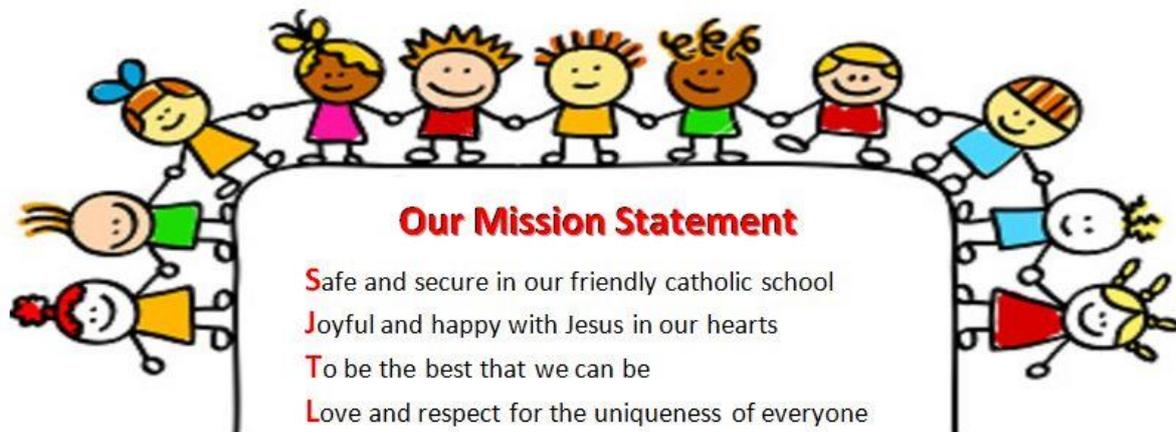


St James the Less RC Primary School



Mathematics Policy

Updated Autumn 2024



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) White Rose Education

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.

3 Scheme of work

To ensure mathematics has a whole-school approach to mastery of the subject, teachers plan lessons using the framework provided by the 'White Rose Maths' (by White Rose Education) schemes of learning. Mathematical topics are taught in blocks, most of which are revisited many times during a child's time in the school. Teachers plan lessons that allow for practice of the three key curriculum aims: fluency, reasoning and problem solving. Independent work provides the means for all children to develop their fluency further, before progressing to increasingly-complex related problems, to enable the achievement of 'mastery' over time. Each lesson phase provides the means to achieve greater depth, as well as there being exploratory, investigative tasks within the lesson as appropriate.

Differentiation is achieved by emphasising deep knowledge and through individual support and intervention.

- Teaching is underpinned by methodical curriculum design and supported by carefully crafted lessons and resources to foster deep conceptual and procedural knowledge.
- Practice and consolidation play a central role. Carefully designed variation within this builds fluency and understanding of underlying mathematical concepts.
- Teachers use precise questioning in class to test conceptual and procedural knowledge and assess children regularly to identify those requiring intervention, so that all children keep up.

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) as the basis for implementing the statutory requirements of the programme of study for mathematics.

The 2014 National Curriculum for Maths aims to ensure that all children: become fluent in the fundamentals of mathematics; are able to reason mathematically; can solve problems by applying their mathematics. Within mathematics lessons, these skills are taught and practised to embed them over time, leading to confident, proficient mathematicians. We aim to develop each child's love of learning and ability to talk freely about their reasoning when tackling problems. We also recognise the importance of mathematics in the wider world, providing children with problems in a range of contexts in which to apply their skills.

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 'White Rose Maths' (White Rose Education). 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

Pupils with special or additional needs are identified early in school. Working with pupils, their families and often, other professionals, the staff team target the specific needs of individuals by:

- identifying needs
- identifying suitable interventions
- obtaining specialist advice and support when needed
- implementing advice and interventions
- maintaining high quality working relationships with parents and carers
- measuring progress and attainment

The school works to address barriers to learning that pupils may face and ensure they can make progress within the provision we offer. Flexibilities are applied to break down barriers. Expectations that all pupils with SEN will make good progress and attain are very high in the school.

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 formative lies at the heart of promoting learning and in raising standards of attainment. We further recognise that effective formative assessment depends crucially on actually using the information gained.

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 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).
 - Year 4 pupils are tested on their knowledge of multiplication facts in a statutory 25-question assessment – the Multiplication Tables Check (MTC). This takes place in June of each year and results are returned to school by the end of the month.
 - Pupils in the Early Years Foundation Stage (EYFS) are assessed against the Early Learning Goals.
 - Refer to Marking and Feedback Policy for further information

8 Presentation

- The date and learning objective/WALT should be underlined using a ruler
- All work in maths books is to be completed in pencil
- All figures must be written neatly and clearly with one figure to each square
- Each calculation and subsequent answer must be clearly numbered but also distinguishable from workings out/notes
- Use a ruler for mathematical drawings
- Children should be taught to cross out mistakes clearly using a ruler. Erasers are to be used at the discretion of the teacher.

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 'White Rose Maths' 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.

13 Marking and Feedback

See Marking and Feedback Policy