# Maths Policy

| Date approved | Committee responsible for review of policy | Next review date | Policy on website | Statutory policy |
|---|---|---|---|---|
| September 2025 | FGB | September 2027 | No | No |

Headteacher: Mrs Fiona Micklefield

## 1. Purpose of the policy

This policy reflects the aims and values of St Lawrence CE Primary School. It ensures all stakeholders, including staff, governors, parents and pupils, are working towards the same goals.

The purpose of this policy is to:

- Set out a framework for all teaching and non-teaching staff, giving guidance on planning, teaching and assessment
- Demonstrate adherence to the National Curriculum objectives and guidelines (if appropriate)
- Provide clear information to parents and carers about what their children will be taught
- Allow the governing board to monitor the curriculum
- Provide Ofsted inspectors with evidence of curriculum planning and implementation

## 2. Subject vison

At St Lawrence, we believe that a secure understanding of Mathematics is a fundamental skill needed for life. We aim for our children to transition to secondary school with a strong sense of number and with the ability to apply their arithmetic understanding across new topics that they will explore. Through a challenging and ambitious curriculum, we aim to prepare them well for the future; we believe that children should be resilient problem solvers, who can independently manipulate number effectively in new contexts. We aim to develop children's confidence and passion for Maths throughout their time with us at St Lawrence. Our systematic teaching of Mathematics aims to ensure high levels of automaticity, resulting in pupils developing an in-depth knowledge across the units being taught. They will become extremely familiar with number facts and formal methods during their time with us – developing on prior learning within previous topics studied. All of our teachers strive for their children to succeed and thrive in Maths; our curriculum is successfully differentiated to ensure that all children are secure in their understanding and appropriately challenged too. Teachers are consistently assessing individual attainment and where necessary interventions and support are put in place to close any gaps that may arise. We aim to intervene early to ensure that children are successful and progress is made throughout their St Lawrence journey.

## 3. Aims and outcomes

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 nonroutine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects.

The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage. 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.

## 4. Teaching and learning

At St Lawrence we believe that a secure understanding of number is crucial to all other areas of Maths. As a result, we volunteered our school to become a part of the Key Stage 1 'Mastering Number' scheme developed by NCETM. The project aims to secure firm foundations in the development of good number sense for all children from Reception through to Year 1 and Year 2. The aim, over time, is that children will leave KS1 with fluency in calculation and a confidence and flexibility with number, through the use of a practical resource called a 'Rekenrek'. Attention is given to key knowledge and understanding needed in Reception classes, and progression is ensured throughout KS1 to support success in the future. The approach is also successful in targeting specific children who may require interventions throughout their time with us at St Lawrence.

Daily arithmetic practise is developed in Key Stage 2 where all year groups complete a short 10-minute fluency session with their classes; this successfully develops pupils understanding of number from Key Stage 1 and Early Years. Children learn the fundamental methods needed to support their understanding of the four operations as well as calculations which involve fractions, decimals and percentages in UKS2. They are encouraged to work systematically, finding efficient ways to work out problems. This daily retrieval ensures

progress is made, providing opportunities for spaced learning which will ultimately support the end of Key Stage 2 SATs Arithmetic Test in Year 6.

To ensure that children are challenged and supported effectively and consistently in Mathematics, our school bases its teaching on the 'Whiterose Scheme' supported by other resources. Here children are able to assess all elements of the curriculum which allow them to explore different avenues and depths of learning. Through varied tasks Maths has become accessible to various types of learners and children of different abilities. This has helped us to adopt a whole-class mastery approach to learning, ensuring that teaching, vocabulary, models and use of language is constant throughout the school. Each year group has a maths working wall which can be referred and added to during the teaching of a specific unit of work – proving additional scaffolding, worked examples and support for those who need it. If children are performing above age-related expectations, we deepen their learning with further reasoning and problem-solving tasks.

By the end of Year 6, we aim to equip our children with the ability to independently tackle a range of problems. At St Lawrence we believe that reasoning is key to long-term learning. The approach states that when children can make logical sense of mathematical ideas, they can use that reasoning for future learning and real-world problem-solving. With this in mind, children are encouraged to complete a range of problem solving and reasoning tasks during their lessons in maths. These tasks are designed to provide them with a deeper understanding of the topics within the primary curriculum, fundamentally preparing them effectively for the end of Key Stage 2 SATs tests.

- Whole-class teaching
- Small group discussions
- Daily fluency lessons
- Daily Rekenrek lessons
- Teaching of fluency, reasoning and problem-solving
- Use of concrete resources
- Investigations
- Pictorial representations
- Models and images

## 5. Curriculum overview

Please see the hyperlink below which takes you to the whole school subject overview on the school website where you can see the subject content across all year groups from EYFS, Key Stage 1 to Key Stage 2.

Curriculum overview

### 5.4 Programmes of study

Please see the hyperlink below which takes you to the National Curriculum.

National Curriculum

## 6. Cross-curricular links

In Maths there are many opportunities for cross curricular links. This may include:

Maths shares links with the following subjects:

- English: verbalising and written explanations of reasoning and problem-solving ideas
- Science: presenting data and findings in graphs and charts
- Geography: Interpreting data about countries, trade, measuring the distance from place to place and interpreting time zones
- Art: tessellation, reflection and repeated patterns using shape
- ICT: TTRockstars, SATs companion, use of Excel, Scratch and Bee Bots for position and direction

## 7. Assessment and recording

### 7.1 Assessment

St Lawrence CE Primary School uses assessment to enable staff to understand what pupils have learnt before, what they need to learn now and what they will learn next.

**Formative assessment**
Formative assessment is ongoing and will be used to inform teachers in relation to their planning, lesson activities and differentiation.

**Summative assessment**
Summative assessment is recorded at the end of each unit of work.

**Feedback**

Children receive regular feedback during the lesson and can receive this at the beginning of the next.

### 7.2 Recording

Pupils will record their learning in the following ways:

- Subject books
- Year R Individual Learning Journey or on Tapestry

This may take the form of photographs, pictures, notes or written work, and may be worksheet-based or fully independent.

## 8. Resources

### 8.1 Educational equipment

Protractors, Mirrors, 3D shapes, place value counters, deans, beakers, jugs, bead strings, money, rulers, place value charts, Gattengo charts, rekenrek

TTRockstars, SATs companion, Hit the button, BBC Bitesize

## 9. Roles and responsibilities

### 9.1 Headteacher

The headteacher at our school will:

- Support the subject leader but also hold them to account for the effectiveness of the subject
- Support staff through the provision of training and resources
- Monitor the planning and delivery of the subject
- Ensure the requirements of the National Curriculum are met
- Ensure this policy is reviewed according to the timescales set out

### 9.2 Subject leader

The subject leaders at our school will:

- Prepare and review subject policy and curriculum plans
- Promote the study of the subject throughout the school
- Monitor the teaching and assessment of the subject
- Attend appropriate CPD
- Stay informed regarding developments in the study and teaching of the subject
- Evaluate resources
- Provide training and CPD to staff on the subject curriculum and its delivery, and keep them informed about subject developments nationally
- Assess the impact of the subject curriculum on pupils' learning and development
- Make presentations to governors on the subject and how it is being taught

### 9.3 Classroom teacher

Classroom teachers at our school will:

- Teach and assess the subject according to the principles laid out in this policy
- Report to the subject leader
- Maintain subject knowledge and appropriate CPD

### 9.5 Parents

The parent community at our school will:

- Make sure their children are prepared for learning

- Sign the home school agreement

## 10. Inclusion

Teachers set high expectations for all pupils in Maths. They will use appropriate assessment to set ambitious targets and plan challenging work for all groups, including:

- More able pupils
- Pupils with low prior attainment
- Pupils from disadvantaged backgrounds
- Pupils with special educational needs (SEN)
- Pupils with English as an additional language (EAL)

Teachers will plan lessons so pupils with SEN and/or disabilities can study Maths, wherever possible, and ensure that there are no barriers to every pupil achieving.

Teachers will also take account of the needs of pupils whose first language is not English. Lessons will be planned so that teaching opportunities help pupils to develop their English, and to support pupils to take part in Maths.

A Support and challenge section forms part of the learning journey planner.

Further information can be found in our statement of equality information and objectives, and in our SEN policy and information report.

## 11. Links to other policies

This subject policy links to the following policies and procedures:

- Curriculum policy
- Assessment policy
- Feedback policy
- SEN policy

## 12. Monitoring and review

This policy will be reviewed by staff and governors every 2 years.

Head Teacher's signature
(Fiona Micklefield)

Chair of Governors' signature
(Paul Whitty)