

# Lewknor Church of England Primary School Maths Policy



# September 2022 – September 2025

## **Christian Vision**

Building strong foundations for a happy and successful life

Like the wise man who built his house on rock (Matthew 7:24-27), we seek God's wisdom to enable us to nurture our school community so that all can flourish and achieve their best in every aspect of school life.

#### Introduction

'Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.'

(National Curriculum 2014)

#### The aims of the 2014 National Curriculum are for our pupils to:

- > Become fluent in the fundamentals of mathematics through varied and frequent practice with complexity increasing over time.
- Develop conceptual understanding and ability to recall and apply knowledge rapidly and accurately.
- > Reason mathematically; follow a line of enquiry, conjecture relationships and generalisations.
- Develop an argument, justification and proof by using mathematical language.
- Problem-solve by applying knowledge to a variety of routine and non-routine problems. Breaking down problems into simpler steps and persevering in answering.

The National Curriculum sets out year-by-year Programmes of Study for Key Stages 1 and 2. This ensures continuity and progression in the teaching of mathematics.

The 'EYFS Statutory Framework' sets standards for the learning, development and care of children from birth to five years old and supports an integrated approach to early learning. This is supported by the 'Development Matters' non statutory guidance.

The EYFS Framework in relation to mathematics aims for our pupils to:

- develop and improve their skills in counting
- understand and use numbers
- calculate simple addition and subtraction problems
- describe shapes, spaces, and measures

## The purpose of mathematics in our school is to develop:

- positive attitudes towards the subject and awareness of the relevance of mathematics in the real world
- competence and confidence in using and applying mathematical knowledge, concepts and skills
- > an ability to solve problems, to reason, to think logically and to work systematically and accurately
- initiative and motivation to work both independently and in cooperation with others
- confident communication of maths where pupils ask and answer questions, openly share work and learn from mistakes
- > an ability to use and apply mathematics across the curriculum and in real life
- an understanding of mathematics through a process of enquiry and investigation

We aim to provide a stimulating and exciting learning environment that takes account of different learning

styles and uses appropriate resources to maximise teaching and learning.

#### **Breadth of study**

Careful planning and preparation ensures that throughout the school children engage in:

- practical activities and games using a variety of resources
- problem solving to challenge thinking
- individual, paired, group and whole class learning and discussions
- purposeful practise where time is given to apply their learning
- open and closed tasks
- a range of methods of calculating e.g. mental, pencil and paper, and using a calculator
- working with computers as a mathematical tool

Through our creative approach to teaching and learning we also seek to explore and utilise further opportunities to use and apply mathematics across all subject areas.

# **Teachings planning Organisation**

## Long term planning

The National Curriculum for Mathematics 2014, Development Matters and the Early Learning Goals (Number, Shape Space & Measure, provide the long-term planning for mathematics taught at Lewknor Church of England Primary School. In addition to this we have chosen to support our Maths curriculum through the implementation of the White Rose Scheme of Learning. To embed this throughout the school we have adopted the 'National Curriculum Progression Years 1-6' document which clarifies the progression of knowledge and skills throughout Lewknor Church of England Primary School. We follow their policies of calculations for 'Addition and Subtraction' and 'Multiplication and Division' to ensure continuity and progression throughout the school.

## Medium term planning

Throughout the school White Rose Maths Hub Schemes of Learning has been adopted as our medium-term planning documents. This scheme provides teachers with a yearly overview and termly overviews to base their planning around. The scheme supports a mastery approach to teaching and learning and have number at their heart. They ensure teachers stay in the required key stage and support the ideal of depth before breadth. They support pupils working together as a whole group small steps and provide plenty of time to build reasoning and problem-solving elements into the curriculum.

#### Short term planning

The above Schemes of Learning also provided the teachers with termly, weekly and daily lesson support and planning. All classes have a daily mathematics lesson. In Key Stage One lessons are 45-60 minutes and in Key Stage Two around 60 minutes.

Teachers in EYFS ensure the children learn through a mixture of adult-led activities and child-initiated activities both inside and outside of the classroom. Daily directed lead teaching sessions are undertaken. Mathematics is taught through an integrated approach.

## Special educational needs & disabilities (SEND)

Daily mathematics lessons are inclusive to pupils with special educational needs and disabilities. Maths focused intervention in school helps children with gaps in their learning and mathematical understanding. These are delivered by trained staff and overseen by the class teacher.

Within the daily mathematics lesson teachers have a responsibility to not only provide support children with SEND but also activities that provide sufficient challenge for children who are high achievers. It is the teachers' responsibility to ensure that all children are challenged at a level appropriate to their ability.

# **Equal Opportunities**

We aim to provide for all children so that they achieve as highly as they can in mathematics according to their individual abilities. All children have equal access to the mathematics curriculum and to suitable learning opportunities regardless of gender, disability, ethnicity or home background. We aim to identify which pupils or groups of pupils are under-achieving and take steps to improve their attainment through an individually tailored programme of intervention. More able children are also identified, and additional provision is mapped. Activities and work are differentiated to enable all to take part. Children with SEND are included in quality first teaching.

#### Lessons

In all lessons, learning objectives are clearly displayed and discussed.

The emphasis in lessons is to make teaching interactive and lively, to engage all children encouraging them to talk about mathematics. Lessons involve elements of:

- Instruction giving information and structuring it well.
- Demonstrating showing, describing and modelling mathematics using appropriate resources and visual displays.
- Explaining and illustrating giving accurate and well-paced explanations.
- Questioning and discussing.
- Consolidating.
- Reflecting and evaluating responses identifying mistakes and using them as positive teaching points.
- Summarising reviewing mathematics that has been taught enabling children to focus on next steps.

#### Marking

Marking of children's work is essential to ensure they make further progress. Children are encouraged to self-assess their work and make corrections or improvements. Children are encouraged to mark their own work in mathematics, with support and guidance from the teacher – particularly in years 3,4,5 & 6. Learning objectives are highlighted at the end of each session according to whether the work was exceeding expectations (green), working at expectation (pink) or need extra support or interventions on that concept (orange).

#### Assessment

#### Short term

Assessment is an integral part of the teaching and learning and is a continuous process. Teachers make assessments of children daily through:

- regular marking of work
- analysing errors and picking up on misconceptions
- asking questions and listening to answers
- facilitating and listening to discussions
- making observations

These ongoing assessments inform future planning and teaching. Lessons are adapted readily, and short-term planning evaluated in light of these assessments.

End of Block tests are given to each child to assess their grasp each 'blocked concept'. This information informs teachers planning and is fed back to the Co-ordinator and Headteacher to monitor children's progress.

#### Medium term

End of Topic and Term assessments are carried out across the school using the assessment materials for each year group provided by the White Rose Maths in line with the Schemes of Learning. These materials used alongside judgements made from class work support teachers in making and assessment of a child's progress. Pupil progress meetings are timetabled each term for all classes with the Headteacher and Co-

coordinator. The progress of pupils is discussed and appropriate interventions are considered and put in place where appropriate.

#### Long term

Y2 and Y6 complete the national tests (SATs) in May.

#### **Resources**

All mathematical equipment and resources are stored centrally in the Lower Juniors room.

## **Role of the Maths Subject Leader**

- > To lead in the development of maths throughout the school.
- > To monitor the planning, teaching and learning of mathematics throughout the school.
- > To help raise standards in maths.
- To provide teachers with support in the teaching of mathematics.
- > To provide staff with CPD opportunities in relation to maths within the confines of the budget and the School Improvement Plan
- > To monitor and maintain high quality resources.
- > To keep up-to-date with new developments in the area of mathematics