

# St Paul's Church of England Primary School Oswaldtwistle



*'Don't let anyone look down on you because you are young but set an example for the believers in speech; in conduct; in love; in faith and in purity (1 Timothy 4:12).'*

## Maths Policy

September 2025

Agreed by Governors: October 2025

*'Working, learning, playing and worshipping together'.*

This policy outlines the guiding principles by which St Paul's Church of England Primary School we follow the National Curriculum for Mathematics, using the Red Rose Scheme of Work.

## INTENT

We believe that all children can be successful in the study of Mathematics. Our aim is to develop active and resilient life- long mathematicians with fluent skills of calculation, reasoning and problem solving to equip them for life beyond school. We are committed to teaching the importance and purpose of Maths in the wider world as well as develop children's appreciation for the beauty and power of Mathematics.

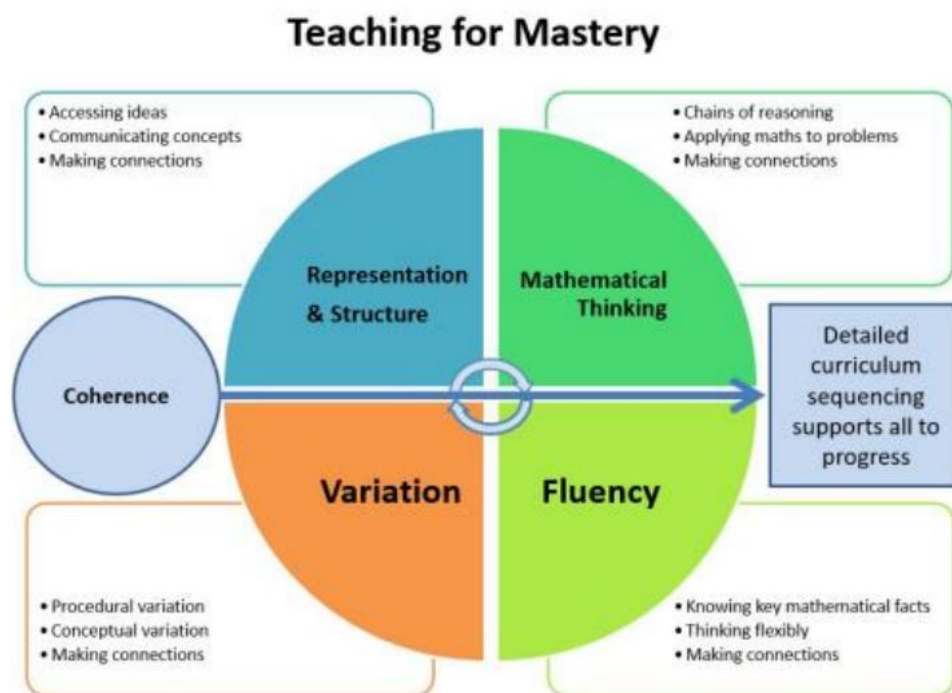
Our Mathematics curriculum aims to ensure all pupils:

- become fluent in the fundamentals of mathematics through varied and frequent practice.
- can reason mathematically by following a line of enquiry or developing an argument using mathematical language.
- can solve problems by applying their mathematics to a range of problems with increasing sophistication.
- can apply their mathematical knowledge to science and other subjects through cross- curricular links.

We follow a 'Teaching for Mastery' approach to mathematics teaching which has at its heart a belief that all children can achieve well, be successful mathematicians and enjoy mathematics. The phrase 'Teaching for Mastery' describes the elements of classroom practice and school organisation that combine to give pupils the best chances of mastering maths. Achieving Mastering maths means pupils acquire a deep secure and adaptable understanding of the subject. This approach promotes teaching for depth and enables children to develop their independence, confidence and competence in mathematics through the use of carefully designed small steps in and across lessons.

The rationale behind adopting a Teaching for Mastery approach to teaching mathematics lay within the NCETM Teaching for Mastery Maths Hub Programme as well as the 2014 National Curriculum, which states:

- The expectation is that most pupils will move through the programmes of study at broadly the same pace.
  - 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
- Our teaching for mastery is underpinned by the NCETM’s 5 Big Ideas illustrated below:



Opportunities for Mathematical Thinking allow children to make chains of reasoning connected with the other areas of their mathematics.

- A focus on Representation and Structure ensures concepts are explored using concrete, pictorial and abstract representations, the children actively look for patterns and generalise whilst problem solving.
- Coherence is achieved through the planning of small, connected steps to link every question and lesson within a topic.
- Teachers use both procedural and conceptual Variation within their lessons to develop conceptual understanding.
- The development of Fluency in number facts is given a high priority both within and outside of maths lessons.

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## IMPLEMENTATION (achieved through effective teaching and learning)

The school uses careful questioning in lessons to enable all children to master the curriculum in maths. Children are encouraged to discuss mathematical problems, ask questions and explain their thinking with more importance placed on 'How do you know?' rather than finding the correct answer. We do this through a daily lesson. All children have the opportunity to use a wide range of manipulatives such as number lines, Base 10, Tens Frames, number squares, digit cards and other small apparatus to support their work.

All children, with the exception of a small minority working two or more years below their year group expectation, follow the same year group scheme of work. Children identified as SEND or underachieving (within two years of their year group) are supported on a 1:1 or group basis by the teacher and TA who draw upon the CPA (concrete- pictorial abstract) approach.

Challenge is available through our daily 'Deeper Learning' task which are reasoning and open- ended problems which are based on the daily lesson focus. The teaching of maths at St Paul's is enhanced by our maths working walls which are designed as a visual support for children to reduce cognitive load. They provide key vocabulary, stem sentences (so there is a common language to scaffold discussions between children) and pictorial examples of learning. We also promote the use of IT for modelling ideas as well as practising times tables using TT Rockstars.

### **Mathematics Curriculum Planning**

At St Paul's CE Primary School, Years 1-6 follow the Red Rose Mastery Scheme of Work as this provides clear progression within and between year groups, an appropriate balance of content and ensures regular revisiting of learning throughout the year. The scheme provides detailed lesson plans, guided tasks and independent tasks with rich variation. Teachers annotate the plans with their notes to personalise the teaching to their children. The use of annotations and personalised teaching is monitored by the SLT and the maths lead on a regular basis.

The Red Rose Mastery Scheme provides daily starters which revisit previous learning.

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The main lesson focus is then introduced to the whole class through an initial problem relating to the objective, which children are able to discuss. This initial problem prompts discussion and reasoning, as well as promoting an awareness that maths is a relatable real-life context that links with other areas of learning. Teachers use careful questions to draw out children's discussions and their reasoning. The teacher will then lead the children through small steps of guided learning using a 'ping-pong/ I do, then you do' interactive approach. Children have opportunities throughout the lesson to work with manipulatives (where appropriate), examples and representations to deepen understanding. Guided learning tasks are designed to check children's understanding of the small steps of learning before they move onto the independent learning. Independent work provides the means for all children to reach deep and secure learning by develop their fluency, reasoning and problem solving using procedural and conceptual variation.

### **The Early Years Foundation Stage**

In the Early Years Foundation Stage (EYFS), we relate the mathematical aspects of the children's work to the development matters statements and the Early Learning Goals (ELG), which are set out in the EYFS profile document. In Reception, we follow the Red Rose Maths Planning, in conjunction with the Lancashire endorsed 'Number Land' theme which is used for lesson starters.

Number Land introduces the number one first which explored in different ways through a variety of questions, visuals and practical learning opportunities. Once the class has shown a secure understanding of the number one, the whole class will move to learning about number two. As a new number is introduced, the questions and tasks also include how the new number relates to the previous numbers that have been learned.

The Red Rose Maths Planning was chosen as it provides high- quality resources which align with the new early learning goals. They encourage the development of the core maths skills that make up the early years curriculum in a logical, small step- by-step approach. The curriculum allows for regular revisiting of skills to consolidate learning in order to build strong mathematical knowledge foundations.

The colourful and lively resources use games, colourful graphics, videos and real-world examples of maths in action to develop a love for leaning in maths

and build positive attitudes towards maths. Varied activities with the teacher and TAs alongside quality continuous provision (indoors and outdoors) allow children to enjoy, explore, practice and talk confidently about maths.

Fluency At St Paul's, fluency is given a high priority. Both within and outside of mathematics lessons, there are opportunities for varied fluency practice (instant recall of key facts, such as number bonds, times tables, division facts, addition and subtraction facts).

Times Tables Programme Years 1-6 use 'Times Table Rockstars' to learn and practise their Times Tables. Times Table Rockstars is a carefully sequenced programme of fun daily times table practice. In class, the children are taught times table facts using a range of visual representations. Children have the opportunity to practise and 'battle' against other children. A Times Table Rockstars whole class display and certificates are used to celebrate children's achievements.

### **Homework**

Each week class teachers will assign mathematics homework, using either the 'My maths' website or by giving a piece of work on paper. This homework will be an extension of work already completed in school and should therefore act as practice, reinforcement and revision. Other activities, which allow children to practise skills, may also be sent home, for example Mental Maths. TT Rockstars is also set as weekly homework in Years 1-6.

### **Computing**

Interactive whiteboards are used in each classroom daily as a demonstration and modelling tool with the whole class. The effective use of IT can enhance the teaching and learning of mathematics when used appropriately. When considering its use, we take into account the following points:

- IT should enhance good mathematics teaching. It should be used in lessons only if it supports good practice in teaching mathematics.
- Any decision about using IT in a particular lesson or sequence of lessons must be directly related to the teaching and learning objectives for those lessons.
- IT should be used if the teacher and/or the children can achieve something more effectively with it than without it.

- to practise skills using My maths and Times Table Rockstars. Children use and apply mathematics in a variety of ways when solving problems using IT.
- Younger children use IT to communicate results with appropriate mathematical symbols. Older children may use it to produce graphs and tables when explaining their results or when creating repeating patterns.

### **Contribution in Mathematics to Teaching in Other Curriculum Areas**

At St Paul's CE Primary School, our whole school curriculum planning ensures there are creative learning opportunities and outcomes for mathematics across other subjects.

#### **English**

Mathematics contributes significantly to the teaching of English in our school by actively promoting the skills of reading, writing, speaking and listening.

#### **Science**

Almost every scientific investigation or experiment is likely to require one or more of the mathematical skills of classifying, counting, measuring, calculating, estimating and recording in tables and graphs. In science, pupils will for example order numbers, calculate simple means and percentages, use negative numbers when observing temperatures and decide whether it is more appropriate to use a line graph or bar chart, and plot, interpret and predict from graphs.

#### **Art/ Design and Technology**

Measurements are often needed in both art and design and technology. Many patterns and constructions are based on properties of shapes, including symmetry. Designs may need enlarging or reducing which require the use of multiplication and ratio. When designing and making food; measurement of ingredients, time and cost is required in order to ensure accuracy.

#### **History, Geography and Religious Education**

In history and geography, children will collect data by counting and measuring and make use of measurements of many kinds. The study of maps includes the use of co-ordinates and ideas of angle, direction, position, scale and ratio. The pattern of the days of the week, the calendar and recurring annual festivals all have a mathematical basis. For older children historical ideas require understanding of the passage of time, which can be illustrated on a timeline, similar to the number line that they already know.

### **Physical Education and Music**

Athletic activities require measurement of height, distance and time, while ideas of counting, time, symmetry, movement, position and direction are used extensively in music, dance, gymnastics and ball games.

### **Personal, Social and Health Education (PSHE)**

Mathematics contributes to the teaching of personal, social and health education, and citizenship. The work that children do outside their normal lessons encourages independent study and helps them to become increasingly responsible for their own learning. The planned activities that children do within the classroom encourage them to work together and respect each other's views. In Year's 5 and 6 children access debt awareness sessions.

### **Teaching Mathematics to Children with Special Educational Needs**

At St Paul's CE Primary School, we aim to provide a broad and balanced education to all pupils. Quality First Teaching is used to ensure all children (except those that are more than two years adrift) are accessing year group expectations. Through effective pupil tracking, struggling learners are identified early, which enables timely interventions in order to narrow the gap or enable them to keep up with their peers. For a small number of children working more than two years below their year group expectations, they will be taught the lesson input by a TA who is continuing to follow the Red Rose Mathematics Scheme from the year group that the children have been assessed as. Their progress is tracked regularly. If further needs are identified, such as a difficulty in retaining mathematical facts and methods, this is referred to the SENCO for further intervention.

We also recognise and aim for 'rapid graspers' to develop a greater depth of understanding through a range of rich and sophisticated problems. The Red Rose Mastery Scheme provides daily 'Deeper Learning' tasks which allow children to experience both routine and non-routine problems.

In the daily mathematics lesson, we support children with English as an additional language in a variety of ways. e.g. repeating instructions, speaking clearly, emphasising key words, using picture cues, playing mathematical games, encouraging children to join in counting, chanting, finger games, rhymes etc.

## **IMPACT OF CURRICULUM (assessment, Recording and Reporting)**

Assessment for Learning will be an integral part of the planning and teaching of lessons, to ensure lessons are well-paced and all pupils make progress in learning through facilitated variation. Prior assessment of the pupils' understanding should be used to inform the planning lessons with a clear progression in knowledge and skills. Opportunities are planned to enable children to develop and apply their skills, knowledge and understanding across the curriculum. The assessment of children's work is ongoing to ensure that understanding is being achieved and that progress is being made.

Feedback is given to the children as soon as possible and marking work will be guided by the school's Marking Policy.

The assessment procedures for maths include:

- Making ongoing assessments and responding appropriately to pupils during 'day-to-day' teaching. These immediate responses are mainly verbal or through 'live' marking throughout a lesson.
- Using knowledge of pupils drawn from ongoing pupil tracking 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. At the end of each term, children in Years 1 to 6 are assessed (Star Assessments) and the results are used to track each child's progress in mathematics. (Sonar).
  - These assessments link directly to the National Curriculum year group expectations. Progress meetings are held throughout the year with class teachers and SLT to discuss children's attainment, progress and any interventions needed.
  - At the end of the school year, assessment data is used to assess progress against school and national targets. Class data is passed on to

the next teacher at the end of the year, so that they can plan for the new school year.

- Samples of work are to be evaluated by the subject leader and SLT through book looks and learning walks.
- Reports to parents are completed during the academic year where indications are made as to the individual's progress in this area of the curriculum. Reporting of maths at the Foundation Stage appears within the 'mathematics' area of learning. An annual summative record is kept of each child's progress in maths. The children are assessed as **A = Working above expectation B = In line with expectation C = Below expectation D = Well below expectation** within ARE for their year group. Foundation Stage will compile an ongoing profile for each individual child as part of their learning journey.

### **Monitoring and Review**

This mathematics policy will be reviewed annually. The Governors Curriculum Committee will be informed of any significant changes in the policy for their approval. The policy is available on the school website. This policy should be read in conjunction with the following school policies:

- Written Calculations Policies (on the maths website)
- Home School Agreement
- Marking and Feedback Policy
- Homework Policy
- Assessment, Recording and Reporting Policy
- Behaviour Policy
- SEN policy