Warton St Paul's
Church of England Primary Academy
A member of CDARI

Maths Policy

Reviewed September 2025

Next review September 2026

Our Mission Statement

‘Believe, Belong, Be the Best that you can Be’

"Whatever you do in word or deed, do everything in the name of the Lord.” Colossians 3:17

1. **AIMS**

At Warton St. Paul's we believe that children flourish when they learn within an orderly, supportive environment where they feel secure and where their individual needs are respected. Mathematics education provides a foundation for understanding the world, the ability to reason mathematically and a sense of enjoyment and curiosity about the subject. We encourage children to not only work fluently but to also be confident problem solvers, promoting multiple methods to solving problems. This provides our pupils with a solid foundation, self- confidence and resilience in Maths.

Pupils Warton St. Paul's Primary School will leave Year 6:
• Demonstrating fluency in the essentials of Mathematics including number and place value, time, shape and measure, statistics, money, addition and subtraction and multiplication and division;
• Being able to reason mathematically;
• Solve problems by applying their mathematical knowledge;
• Understand, and be prepared for, how Maths applies to everyday life;
• Able to apply their Maths skill and understanding in a range of cross-curricular topics;
• Having a suitable technical vocabulary to articulate their responses.

2. **STATUTORY REQUIREMENTS**

Statutory requirements for the teaching and learning of Maths were laid out in the National Curriculum Maths Document (2000) leading to the New Curriculum (2014) and in the Mathematics section of the **2021 Statutory Framework** (updated 2024)

The National Curriculum Maths programme of study (2014) is based on 9 areas:
• Number and place value
• Addition, subtraction, multiplication and division
• Fractions, decimals and percentages
• Ratio and proportion
• Measurement
• Algebra
• Properties of shapes
• Position and direction
• Statistics

The National Curriculum is divided into year groups. By the end of each year, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study. The National curriculum 2014, gives detailed guidance of what should be taught in each year group.

In the **Early Years Foundation Stage**, we follow the **2021 Statutory Framework** (updated 2024), which focuses on developing a deep understanding of numbers to 10, the relationships between them, and the patterns within those numbers.

Areas of Learning

The curriculum is organized into two key **Early Learning Goals (ELGs)**:

- **Number:** Children learn to count reliably and develop a deep creates-and-compares understanding of numbers to 10, including the "composition" of each number (e.g., knowing that 5 is made of 2 and 3).
- **Numerical Patterns:** Children explore patterns within numbers up to 10, including evens and odds, double facts, and how quantities can be distributed equally.

Implementation

- **Daily Learning:** Children engage in daily discrete sessions alongside integrated "maths talk" during play.
- **Subitising:** We prioritize the ability to recognize quantities without counting (e.g., looking at a die and knowing it is 5), which builds the foundation for mental fluency.
- **Practical Exploration:** Using concrete resources and everyday language, children compare quantities and explore attributes such as size, weight, capacity, position, and time.
- **Spatial Reasoning:** While no longer a standalone ELG, we continue to provide rich opportunities for children to compose and decompose shapes and recognize patterns in their environment.

At Key Stage One (Years 1 and 2) pupils develop confidence and mental fluency with whole numbers, counting and place value. They work with numerals, words and the four operations, including with practical resources. Children develop their ability to recognise, describe, draw, compare and sort different shapes and use the related vocabulary. Teaching involves using a range of measures to describe and compare different quantities such as length, mass, capacity/volume, time and money. By the end of year 2, pupils should know the number bonds to 20 and be precise in using and understanding place value. An emphasis on practice at this early stage will aid fluency. Pupils should read and spell mathematical vocabulary, at a level consistent with their increasing word reading and spelling knowledge at key stage 1.

At Key Stage Two (Years 3-6) pupils become increasingly fluent with whole numbers and the four operations. They develop efficient written and mental methods and perform calculations accurately with increasingly large whole numbers. Pupils are given opportunity to develop their ability to solve a range of problems and develop mathematical reasoning. By the end of year 4, children should have memorised their multiplication tables up to and including the 12-multiplication table. Pupils should read and spell mathematical vocabulary correctly and confidently, using their growing word reading knowledge and their knowledge of spelling. By the end of year 6, pupils should be fluent in written methods for all four operations, including long multiplication and division, and in working with fractions, decimals and percentages.

The Governing Body receives regular reports on the progress of Maths provision.

3. **SUBJECT ORGANISATION**

Foundation Stage

In the Foundation stage, children have daily discrete lessons involving number, shape and space. Children have opportunities to develop their communication, fluency and problem solving skills on a daily basis in both adult led and child initiated activities.

Key Stage 1

Key Stage 1 have daily mixed ability Maths lessons, which follow our school's own curriculum planning and is supplemented by other schemes such as White Rose and NRich. Children take part in short, daily arithmetic sessions, which revise previously learned topics. Provision is made for children who require extra support through intervention programmes (e.g. Fluent in Five) and differentiated class teaching.

Key Stage 2

Key Stage 2 have daily mixed ability Maths lessons, which follow our school's own curriculum planning and is supplemented by other schemes such as White Rose and NRich. Every morning, children take part in short, daily arithmetic sessions, which revise previously learned topics. Provision is made for children who require extra support through intervention programmes (e.g. Fluent in Five) and differentiated class teaching.

4. **Calculation Progression: A Journey to Fluency**

This table outlines the transition from concrete "doing" to formal written "recording" across the school

Operation	**Key Stage 1 (Years 1-2)**	**Lower Key Stage 2 (Years 3-4)**	**Upper Key Stage 2 (Years 5-6)**
Addition	Concrete: Using beads and base-10 to build numbers. Pictorial: Drawing "part-whole" models.	Transition to formal column addition with 3 and 4-digit numbers.	Column addition with decimals and multiple large integers.
Subtraction	Taking away physical objects; counting back on a numbered track.	Column subtraction (decomposition) involving "exchanging" across columns.	Applying subtraction to multi-step problems and fractions.
Multiplication	Doubling and counting in steps of 2, 5, and 10 using arrays.	Developing grid method and moving into short multiplication.	Mastery of long multiplication (multi-digit numbers).

Division	Halving and "sharing" items into equal groups physically.	Dividing 2 and 3-digit numbers by a 1-digit number using "bus stop" method.	Mastery of long division and expressing remainders as fractions or decimals.

5. **APPROACHES TO TIMES TABLES**

Fluency of times tables underpins the basis of many areas in Maths. Due to this, we aim to develop the children's confidence and knowledge of their times tables so that they are ready and able to pass their assessment at the end of year 4 and can use this knowledge as a foundation to use in other areas of Maths. The children are taught age-related times tables during Maths lessons:

Expectations for times tables for each year group:	
Year 1	Count in multiples of 2, 5 and 10. Recall and use all doubles to 10 and corresponding halves.
Year 2	Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.
Year 3	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.
Year 4	Recall and use multiplication and division facts for multiplication tables up to 12x12.
Year 5	Revision of all times tables and division facts up to 12x12.
Year 6	Revision of all times tables and division facts up to 12x12.

Children are given opportunities to play board games, along with interactive games such as 'Hit the Button' and are given opportunities to be tested throughout years 3 and 4 so that they are familiar with the format and expectations of their standardised test.

All children have access to 'Times Tables Rock Star' which is set up in school and they are encouraged to use it at home to challenge each other and themselves with their speed and accuracy with their Times Tables.

6. **CROSS-CURRICULAR MATHS OPPORTUNITIES**

Teachers will seek to take advantage of opportunities to make cross-curricular links. They will plan for pupils to practise and apply the skills, knowledge and understanding acquired through Maths lessons to other areas of the curriculum, with

a particular focus in our school of the same standard of presentation as seen in Maths books.

7. **THE USE OF IT**

We recognise the important role ICT has to play in our school in the development of Maths skills. ICT is used to enhance the teaching of Maths and to give all children the opportunity to experience, read and create various aspects of Maths using technology. The use of ICT is cross – curricular.

8. **ASSESSMENT AND TARGET SETTING**

Work will be assessed in line with the Assessment Policy and will use it to inform their daily differentiation. Assessment will be reported in half termly Pupil Progress Meetings. Pupils will have Maths targets where appropriate and will know their 'next steps' to ensure progression.

9. **INCLUSION** We aim to provide for all children so that they achieve as highly as they can in Maths according to their individual abilities. We will identify which pupils or groups of pupils are under-achieving and take steps to improve their attainment through adaptation. Gifted children will be identified and suitable learning challenges provided.

10. **ROLE OF SUBJECT LEADER**

The Subject Leader is responsible for improving the standards of teaching and learning in Maths through:

- monitoring and evaluating Maths:
    - pupil progress
    - provision of Maths
    - the quality of the Learning Environment,
- taking the lead in policy development,
- auditing and supporting colleagues in their CPD,
- purchasing and organising resources,
- keeping up to date with recent Maths developments.

11. **PARENTAL INVOLVEMENT**

We aim to involve parents in the development of children's skills, knowledge and understanding in Maths. Parents are invited into school to discuss our approach to

arithmetic and are encouraged to work with their children at home and support with homework.

There are opportunities each term when parents can discuss their children's progress with their teacher.

Times Tables Assessments (Year 4) and SATs results (Year 6) are published in accordance with Government legislation.

This policy will be reviewed according to the emerging needs of our school.

Signed ……Date …… (Chair of Governors)

Signed ……Date …….. (Headteacher)