



MATHS CURRICULUM OVERVIEW FOR PARENTS

OUR SCHOOL VISION

“Striving for excellence together in a caring Christian community.”

RESPECT COMPASSION COURAGE

As a Church school, we believe that people grow in mind, body and spirit. Christian values are the foundation of our teaching and our ethos as we strive together for excellence for all. We aim for each member of our school community to fully engage in the great adventure that is Primary education.

Working together, we aim for all of our school community to become:

- successful learners who enjoy learning and exploration, make progress and achieve;
- confident, well-rounded individuals who are able to live safe, healthy and fulfilling lives; and
- responsible citizens with strong moral and social values who make a positive contribution to society.

“I came to give life—life in all its fullness.” John 10:10

LIVING OUR VISION THROUGH MATHEMATICS

Our Mathematics curriculum helps children become confident, curious and collaborative problem solvers who use number and reasoning to make sense of everyday life. Children work together on group problems and puzzles that build resilience, shared strategies and respect for different approaches. They explore mathematical patterns and real-life applications, including basic financial skills that help them manage everyday choices. Lessons encourage accuracy, fairness and logical thinking so children are ready to contribute positively to their communities and future workplaces.

OUR MATHEMATICS CURRICULUM

We base our Mathematics teaching on the Power Maths (White Rose Edition) resource. This approach uses a mastery model, ensuring children develop a deep and sustainable understanding of mathematical concepts before moving on. Our curriculum is structured for each year group, covering the full breadth of the National Curriculum.

YEAR GROUP BREAKDOWN

- **Reception: Exploring Number and Patterns** Children develop a deep understanding of **number to 10**, including the composition of each number. They learn to **subitise** (recognise quantities without counting) and explore numerical patterns such as **doubling, halving, and odds and evens**. Pupils also explore spatial reasoning through 2D and 3D shapes and patterns.



- **Year 1: Building Foundations** Pupils focus on **numbers to 100** and the **part-whole model**. They learn addition and subtraction within 20, recognise common 2D and 3D shapes, and are introduced to practical measures like **money, time, and weight**.
- **Year 2: Developing Fluency** Children work with **numbers to 100**, mastering addition and subtraction of two-digit numbers. They learn **multiplication and division facts for the 2, 5, and 10 times tables** and begin exploring fractions (halves, quarters, and thirds). They also begin to interpret simple **statistics** such as tally charts and pictograms.
- **Year 3: Expanding Horizons** Pupils are introduced to **numbers up to 1,000** and formal written methods of **columnar addition and subtraction**. They learn the **3, 4, and 8 times tables** and develop their understanding of unit and non-unit fractions. Measurement expands to include **perimeter** and telling time to the minute.
- **Year 4: Extending Patterns and Decimals** The curriculum moves into **4-digit numbers** and mastering all **multiplication tables up to 12 x 12**. Pupils are introduced to **area, decimals, and negative numbers**, and they learn to convert between different units of time and measure.
- **Year 5: Mastering Complexity** Children work with **numbers up to 1,000,000** and explore **prime, square, and cube numbers**. They master long multiplication and short division, calculate the area of compound shapes, and are introduced to **percentages** and **thousandths**.
- **Year 6: Consolidating and Applying** In their final year, pupils work with **numbers up to 10,000,000** and the four operations in complex multi-step problems. They are introduced to **ratio, proportion, and algebra**, as well as interpreting **pie charts** and calculating the **mean** as an average.

PROGRESSION

Our Mathematics curriculum follows a clear path of progression:

- **Concrete to Abstract:** Children start by using physical objects (concrete) to understand numbers, move to using drawings (pictorial), and finally use numbers and symbols (abstract).
- **Calculation:** Progression moves from simple counting to mental strategies, then to formal written methods (columnar addition, long multiplication, and long division) as the complexity of numbers increases.
- **Reasoning:** Children progress from describing simple patterns to justifying their mathematical thinking and solving complex, multi-step problems that require logical deduction.



HOW PARENTS CAN SUPPORT

- **Cooking and Baking:** Use recipes to practice measuring mass (grams/kilograms) and volume (millilitres/litres).
 - **Shopping:** Use real money to practice adding amounts, calculating change, and understanding "value for money."
 - **Time:** Practice telling the time on both analogue and digital clocks. Discuss durations, such as "How long until we leave for swimming?"
 - **Games and Puzzles:** Play board games with dice or card games to build mental fluency and shared strategies.
 - **Financial Awareness:** Talk about household budgets or saving for a special item to build real-life financial skills.
-

GLOSSARY OF TECHNICAL TERMS

- **Subitise:** The ability to look at a small group of objects and immediately know how many there are without counting them.
- **Number Bonds:** Pairs of numbers that add together to make a specific total (e.g., number bonds to 10 include $7 + 3$).
- **Part-Whole Model:** A visual representation showing how a whole number can be split into two or more parts.
- **Place Value:** The value of each digit in a number (e.g., in 345, the '3' represents 3 hundreds).
- **Perimeter:** The total distance around the outside of a 2D shape.
- **Area:** The amount of space inside a 2D shape, often measured by counting squares.
- **Ratio:** A way to compare two or more quantities, showing how much of one there is compared to another.
- **Algebra:** A branch of maths where letters or symbols are used to represent unknown numbers in formulas or equations.