



# Mathematics at St Peter's C of E Primary Academy

*'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.'*

The National Curriculum in England, Key stages 1 and 2 framework document, September 2013

## INTENT

At St Peter's C of E Primary Academy, we value every pupil and the contribution they have to make. As a result, we aim to ensure that every child acquires the intended knowledge and skills through a coherently planned and sequenced inclusive curriculum appropriate for their age. The mathematics curriculum is ambitious for all children, building upon what children know and can do, enabling them to develop the mathematical skills they need to succeed in the next stage of learning. The mathematics curriculum is designed and delivered in a way that allows children to transfer key knowledge to long-term memory. It is sequenced so that new knowledge and skills build on what has been taught before and children can work towards clearly defined end points.

The purpose of mathematics in our school is to develop:

- foundational knowledge, particularly proficiency in number, to give pupils the ability to progress through the curriculum.
- unconscious competence and confidence in mathematical knowledge, concepts and skills.
- an ability to communicate, read, write and apply mathematics.
- an ability to use and apply mathematics across the curriculum and in real life.
- resilience to solve problems, to reason, to think logically and to work systematically and accurately.
- a positive attitude towards mathematics and an awareness of the relevance of mathematics in the real world.
- initiative and an ability to work both independently and in cooperation with others.
- an understanding of mathematics through a process of enquiry and experiment.

## IMPLEMENTATION

At St Peter's C of E Primary Academy, **staff** will:

- have sufficient mathematical and teaching content knowledge to deliver topics effectively.
- plan and deliver learning in manageable steps where core concepts build seamlessly in knowledge acquired in previous phases.
- plan opportunities to revisit previously learned knowledge, concepts and procedures.
- be flexible with planning so that they can address identified gaps in children's mathematical knowledge that hinder their capacity to learn and apply new content.
- model new procedures and use resources and approaches that enable children to understand the mathematics they are learning and make independent choices regarding when and what to use.
- provide opportunities for enactive – iconic – symbolic representations (Build it – Draw it – Write it) as children learn and secure a conceptual understanding.
- support children in developing fluency, and not simply memorising facts, so that they can unconsciously apply their knowledge as skills.
- identify opportunities for reasoning and problem solving in all areas of mathematics regardless of age or ability, allowing children to make connections.
- create an environment that supports the intent of our ambitious curriculum.
- promote a confident, positive attitude towards the learning and use of Mathematics making it an enjoyable experience.
- encourage children by believing that every child, with hard work, can be good at Mathematics.



# Mathematics at St Peter's C of E Primary Academy

At St Peter's C of E Primary Academy, we aim to ensure that all *children* will:

- become numerically proficient.
- become fluent in the fundamentals of mathematics and embed these in their long-term memory.
- reason mathematically.
- solve problems by applying their mathematics to a variety of routine and non-routine problems.
- develop an enjoyment of learning through practical activity, investigation, exploration, challenge and discussion.
- appreciate and understand the importance of Mathematics in everyday life.
- foster positive attitudes towards Mathematics.

In Mathematics, **Teaching and Learning** will:

- provide children with a minimum of a discrete one-hour maths lesson per day which will be inclusive to all children and take account of their differing needs.
- provide children with a **daily 15 minute** 'Recall and Memory' session.
- provide children with a **daily 15 minute** 'Mental Fluency' session.
- offer daily opportunities for counting forwards and backwards.
- encourage mathematical talk including the use of correct vocabulary.
- use a variety of teaching and learning styles in lessons.
- use the principles and aims of the National Curriculum for Mathematics 2014 at the heart of mathematics teaching and learning and teachers will follow a carefully sequenced long-term plan and curriculum map for mathematics ensuring equal coverage of the National Curriculum in Years 1-6.
- follow the September 2021 EYFS framework and a carefully sequenced curriculum document which focuses on developing different mathematical skills throughout the year additional to the times when children will encounter, explore and learn the concepts within provision ensuring children secure the mathematical foundational knowledge and understanding they will need for key stage 1 and for the rest of their schooling;
- ensure EYFS children learn through a mixture of adult-scaffolded activities and child-initiated activities both inside and outside of the classroom.
- expect teachers to make short-term plans appropriate for the differing needs of their class whilst ensuring all children have access to achieving their age-related expectations.
- ensure staff teach written calculation in-line with Jenny Cook's 'A Journey to Written Calculation' – all staff have engaged in training during Spring 2025 and any new staff will be trained accordingly.
- encourage children to consider if the mathematics can be done mentally before resorting to a written method.
- require support staff to work under the direction of the class teacher.
- promote a conceptual understanding through the provision of enactive – iconic – symbolic representations (Build-it, Draw-it, Write-it).
- teach children a variety of methods for recording their work, encourage and help them to use the most appropriate and efficient method of recording.
- not require children to record anything in their books when lessons are purely practical, however the learning journey will be evident in teacher's planning and annotations.
- identify rapid intervention needs as part of teaching and learning and act swiftly to ensure security of pupil's understanding and readiness to progress.
- challenge children who grasp concepts rapidly through deep and rich learning opportunities before pace through the curriculum – 'depth before pace'.
- look for opportunities for use and application of mathematics outside of the discrete lesson.
- link skills across the curriculum where appropriate.

In Mathematics, **Assessment** will:

- support the teaching, determining what children know, understand and can do so that all teaching meets the differing needs of all children.
- identify learners who may need early help and learners who need challenge.



# Mathematics at St Peter's C of E Primary Academy

- check that children embed and use knowledge fluently and flexibly, evaluate the application of skills and/or check for understanding to inform teaching.
- not be used in a way that creates unnecessary burdens on staff or children.
- make assessments, through daily Recall and Memory sessions, of prior learning to check that all children have gained the intended understanding and unconscious competence in knowledge, concepts and procedures taught and that these are secured in long-term memory.
- make diagnostic assessments, through daily Recall and Memory sessions, of future learning objectives (next week) to check that all children have firm foundations in place and are ready for the next stage in learning.
- adhere to the school's marking and feedback policy within daily lessons to make assessments in order to inform groupings, plan next steps and adapt teaching and learning considering how to address gaps in pupils' knowledge and skills and how to offer opportunities for deeper thinking.
- ensure support staff feedback observations / assessments to the class teacher immediately after or during the session.
- ensure marking will distinguish between a pupil's simple slip and a misconception that reflects a lack of understanding. Where slips occur, teachers will encourage children to correct them using a dot. Where misconceptions appear, teachers will identify them using  $\square$ . Teachers may decide to take an alternative course of action for misconceptions; through adaptive teaching considerations for the next lesson, or on some occasions, with a small number of children, the teacher may arrange same-day intervention.
- use formal testing in KS1&2 on three occasions over the academic year using the Rising Stars PUMA assessments or the STA KS1/2 Tests. Results are reported on Insight and used to inform discussions at Pupil Progress Meetings including decisions regarding intervention groups.
- monitor progress in Y2, Y3 and Y4 regarding times tables knowledge in preparation for the Y4 Multiplication Tables Check. Results will then be considered, and appropriate action will be planned to support children not meeting age-related expectations. Any children not successful with the Y4 MTC will then continue to be supported as they move through upper key stage 2 to gain this foundational knowledge.
- use the Early Learning Goals in the Early Years during the summer term.
- ensure summative teacher assessments are used at the end of Key Stage 1 in line with statutory guidance.
- use the Early Learning Goals for assessment purposes during the summer term.

## IMPACT

The mathematics subject leader and other senior leaders will monitor and evaluate the quality of mathematics education. A Monitoring and Evaluation Plan will be used to guide actions whilst being mindful of teacher wellbeing. All actions will be evaluated, and any feedback shared with the appropriate person whilst considering next steps.