

St Peter's CE Academy
Mathematics Policy
September 2026

1 Introduction

This policy explains how mathematics is planned, taught, assessed and monitored at St Peter's CE Academy from Nursery to Year 4. It should be read alongside the school's Calculation Policy, Assessment Policy, SEND Policy, Equality Policy and relevant safeguarding and online-safety procedures.

We want every child to see themselves as a successful mathematician. Our curriculum develops secure knowledge, fluency, reasoning and problem-solving through carefully sequenced teaching, purposeful practice, mathematical talk and practical exploration. Our Christian values of Love, Friendship and Respect shape a classroom culture in which children listen to one another, learn collaboratively, persevere and understand that mistakes are a valuable part of learning.

2 Aims

At St Peter's CE Academy, we aim for all children to:

- develop a positive, confident and resilient attitude towards mathematics;
- build secure conceptual understanding and efficient procedural fluency;
- recall and apply key number facts with increasing accuracy and automaticity;
- reason mathematically using appropriate vocabulary, representations and evidence;
- solve problems in familiar and unfamiliar contexts and explain their choices;
- make connections between mathematical ideas and apply mathematics across the curriculum and in everyday life;
- experience appropriate support and challenge so that all pupils can succeed and those who are ready can explore ideas in greater depth.

3 Statutory framework and curriculum organisation

In Nursery and Reception, mathematics is taught within the statutory Early Years Foundation Stage framework. Provision supports children's development in Number and Numerical Patterns, while recognising that mathematical development is strengthened through communication and language, physical development and purposeful play.

In Years 1-4, teaching follows the statutory National Curriculum for mathematics in England. The curriculum is organised so that pupils revisit and build on prior knowledge as they progress through the school. In mixed-age classes, teachers use professional judgement to ensure that learning is appropriately sequenced and that the statutory content for each year group is taught.

White Rose Maths provides the main structure and small-step sequence for curriculum planning from Nursery to Year 4. It is a planning resource rather than a script: teachers adapt the sequence, pace, representations, examples and practice in response to prior learning and ongoing assessment.

4 Teaching for mastery

Our mastery approach is based on the expectation that all pupils can make progress in mathematics. New learning is broken into coherent steps, with sufficient time for pupils to understand important concepts. Teachers identify the essential knowledge, representations, language and connections within each lesson and check understanding before moving learning on.

- Whole-class teaching is used where appropriate, with adaptations that enable pupils to access the same important mathematical ideas.
- Key facts and procedures are practised systematically so that pupils become accurate, efficient and increasingly fluent.
- Teachers use carefully chosen examples and non-examples to draw attention to mathematical structure.
- Pupils who grasp concepts quickly deepen their understanding through reasoning, generalising and more complex applications rather than simply accelerating to later curriculum content.
- Pupils who need more support receive timely scaffolding, additional modelling, focused practice or intervention.

5 The mathematics teaching sequence

Lessons are responsive to the content and pupils' needs, but effective teaching commonly includes:

- retrieval of relevant prior knowledge and key facts;
- explicit teaching and modelling using precise mathematical language;
- concrete resources and pictorial representations that expose the underlying structure;
- guided and independent practice with frequent checks for understanding;
- opportunities to explain, compare, justify, prove and solve problems;
- review of learning and identification of misconceptions or next steps.

6 Concrete pictorial and abstract representations

Teachers use a concrete-pictorial-abstract approach to help pupils connect practical experience, visual structure and mathematical notation. Manipulatives and representations are selected because they reveal the mathematics; they are not limited to younger pupils or used as rewards. Pupils are taught how and why a resource

represents an idea and are supported to move flexibly between representations when ready.

The school's Calculation Policy sets out agreed representations, vocabulary and methods. This supports consistency between classes and smooth progression from informal strategies to efficient mental and written calculation.

7 Fluency reasoning and problem-solving

Fluency

Fluency includes secure understanding, flexible use of number relationships, accurate recall of key facts and efficient selection of methods. Practice is deliberately designed and interleaved so that pupils retain and apply learning rather than merely repeat a procedure.

Reasoning

Pupils are expected to notice patterns, make connections, explain methods, compare approaches, justify answers and use examples or counterexamples. Teachers model complete mathematical sentences and expect increasingly precise use of vocabulary.

Problem-solving

Problem-solving is woven through the curriculum. Pupils learn to interpret a problem, select relevant information and representations, choose and adapt a strategy, check whether an answer is reasonable and communicate their thinking.

8 Mathematical language and talk

High-quality mathematical talk helps pupils organise and deepen their thinking. Teachers explicitly teach and revisit key vocabulary, model accurate language and provide sentence stems or visual prompts where helpful. Children are given time to rehearse ideas with a partner, listen respectfully, ask questions and explain how they know. Informal language is valued as a starting point and connected carefully to precise mathematical terms and symbols.

9 Early Years Foundation Stage

In Nursery and Reception, mathematics is practical, purposeful and rooted in children's experiences. White Rose Maths supports curriculum planning, alongside the statutory EYFS framework and teachers' knowledge of the children. Adults teach planned mathematical learning and also recognise, model and extend mathematics within play, routines and the wider environment.

Provision includes opportunities to:

- develop a secure sense of number, quantity and the relationships between numbers;
- subitise, count accurately and explore composition;
- compare quantities, measures, shapes and spatial relationships;
- notice, copy, continue and create patterns;
- use stories, songs, rhymes, movement, games and meaningful problems;
- represent ideas using objects, fingers, marks, images and numerals;
- use mathematical language through sustained, high-quality interactions.

Resources are available within continuous provision so that children can revisit and apply learning independently. Adults observe carefully, ask purposeful questions and decide when to model, extend or step back. Transition into Year 1 builds from children's experiences and assessment information while introducing the National Curriculum in an age-appropriate way.

10 Multiplication and number-fact fluency

Number-fact fluency is developed progressively through explicit teaching, frequent retrieval and opportunities to apply facts in different contexts. In Key Stages 1 and 2, Times Tables Rock Stars is used as one tool to support appropriately selected practice of multiplication and division facts. It complements, but does not replace, direct teaching, practical representations, reasoning and assessment.

By the end of Year 4, pupils are taught to recall multiplication and division facts up to 12×12 in line with the National Curriculum. Year 4 pupils take the statutory multiplication tables check. Results are used alongside wider teacher assessment and are not treated as a complete measure of mathematical attainment.

11 Planning

Teachers plan from statutory expectations, the school's curriculum progression, White Rose Maths and assessment of pupils' starting points. Planning identifies the intended knowledge, vocabulary, representations, likely misconceptions, adaptations and opportunities for reasoning and problem-solving. Teachers may spend more or less time on a small step, revisit prerequisite knowledge or select alternative examples when assessment shows this is needed.

Planning in mixed-age classes protects progression for each year group while identifying purposeful opportunities for shared teaching. Support staff are briefed

about the mathematical purpose of the lesson, expected methods and how to promote independence.

12 Assessment

Assessment is proportionate and used to improve teaching and learning.

Formative assessment

Teachers assess during lessons through observation, questioning, discussion, practical activity, pupils' explanations and review of work. Checks are designed to reveal understanding and misconceptions, not only whether an answer is correct. Teachers respond through immediate feedback, further modelling, adjusted practice, pre-teaching, same-day support or changes to future planning.

Assessment in Nursery and Reception

Assessment is ongoing and primarily based on teachers' knowledge of each child, gained through observation, interaction, questioning and children's independent learning. Teachers use professional judgement to assess progress against relevant EYFS expectations and, at the end of Reception, the Early Learning Goals. Evidence is gathered naturally and proportionately; children are not required to complete unnecessary formal recording for assessment purposes.

Reception children complete the statutory Reception Baseline Assessment within the required assessment period. At the end of Reception, teachers complete the Early Years Foundation Stage Profile, using their knowledge of each child and professional judgement to assess attainment against the Early Learning Goals.

Assessment in Years 1-4

Teacher assessment draws on evidence from daily learning and pupils' ability to apply knowledge independently. Pupils complete termly Testbase assessments. These provide additional information about attainment, curriculum coverage, misconceptions and gaps, but do not replace professional judgement. Outcomes inform planning, targeted support, pupil progress discussions and monitoring by leaders.

Assessment information is shared appropriately with parents and carers through parents' meetings and annual reports. Relevant information is passed to the next teacher and, where applicable, the child's next school.

13 Feedback and pupils' work

Feedback follows the school's agreed approach and is most effective when it is timely and helps pupils improve. It may be verbal, practical or written. Pupils are given

meaningful opportunities to correct errors, practise a step again, explain their reasoning or respond to an additional question. Recording expectations are appropriate to pupils' age, stage and the mathematical purpose of the task.

14 Inclusion adaptive teaching and SEND

All pupils are entitled to an ambitious mathematics curriculum. Teachers anticipate barriers and adapt teaching while maintaining high expectations. Adaptations may include additional modelling, smaller steps, manipulatives, visual supports, vocabulary rehearsal, accessible recording, carefully chosen examples, extra processing time and focused adult support. Adaptations are reviewed so that they promote participation, understanding and independence rather than creating long-term reliance.

Where a pupil has special educational needs or disabilities, teachers work with the SENCo and families and follow the graduated approach of assess, plan, do and review. Short, targeted interventions address identified needs and are connected closely to classroom teaching. Their impact is reviewed. Pupils with English as an additional language are supported through visuals, modelling, repetition and explicit teaching of mathematical language without reducing the mathematical ambition.

15 Greater depth

Greater depth is demonstrated through secure, connected and flexible understanding. Pupils who are ready are challenged to explain why a method works, compare efficient strategies, represent a concept in different ways, identify patterns and generalise, prove or disprove statements, and solve unfamiliar or multi-step problems. Challenge focuses on depth within age-appropriate content rather than premature acceleration.

16 Equality and equitable access

The school promotes equality of opportunity and challenges stereotypes about who can be successful in mathematics. Teachers monitor participation and attainment, select inclusive examples and ensure that resources, questioning and enrichment are accessible. Reasonable adjustments are made in accordance with pupils' needs and the school's duties under equality legislation.

17 Cross-curricular mathematics

Pupils apply mathematics meaningfully in other subjects, including science, computing, design and technology, geography, art and physical education. Cross-curricular opportunities reinforce rather than replace explicit mathematics teaching. Teachers use consistent mathematical language and methods so that pupils can transfer learning accurately.

18 Resources and learning environment

Classrooms provide age-appropriate access to mathematical equipment and representations. Shared resources are organised, maintained and used safely. Displays and working walls support current learning and may include vocabulary, models, representations and examples generated with pupils. Resources are chosen for their mathematical purpose and reflect the school's agreed progression.

19 Home-school partnership

Parents and carers are encouraged to support positive attitudes towards mathematics through counting, games, measures, money, time and everyday problem-solving. The school communicates relevant learning and progress and may share suitable activities or resources. Times Tables Rock Stars supports practice in Years 2, 3 and 4. Where access to devices or the internet is a barrier, an appropriate alternative is provided.

20 Safeguarding and online learning

Mathematics teaching follows the school's safeguarding, data-protection and online-safety arrangements. Digital tools are used purposefully and with appropriate supervision. Staff protect pupils' personal information, use school-approved services and teach children to use technology safely. Any safeguarding concern arising during mathematics or online activity is reported in line with school procedures.

21 Roles and responsibilities

Those responsible for governance

Those responsible for governance provide strategic oversight of curriculum provision, inclusion, safeguarding and the use of resources. They hold leaders to account for the quality and impact of mathematics while respecting the professional responsibilities of school leaders and teachers.

Headteacher and senior leaders

The Headteacher and senior leaders ensure that the curriculum meets statutory requirements, that staff have suitable time, resources and professional development, and that assessment and monitoring lead to appropriate action.

Mathematics Subject Leader

- provides a clear vision and supports consistent curriculum implementation;
- maintains curriculum progression and the Calculation Policy and Progression document;
- supports colleagues with subject knowledge, planning, pedagogy and assessment;

- monitors provision and outcomes through proportionate activities such as planning reviews, learning visits, work scrutiny, pupil voice and discussion with staff;
- reviews assessment information, identifies priorities and evaluates the impact of actions;
- audits resources and recommends appropriate professional development;
- reports relevant findings to senior leaders and those responsible for governance.
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Class teachers

Class teachers plan and teach coherent, inclusive lessons; maintain high expectations; use assessment responsively; provide appropriate support and challenge; communicate with families; and contribute to moderation, monitoring and professional development.

Teaching assistants and other adults

Support staff work from teachers' guidance, use agreed language and representations, ask questions that develop thinking and promote pupils' independence. They share relevant observations with the teacher.

Pupils

Pupils are encouraged to participate actively, use resources responsibly, explain their thinking, listen respectfully, persevere and seek help when needed.

22 Monitoring and evaluation

The Mathematics Subject Leader and senior leaders evaluate whether the intended curriculum is being implemented and whether pupils are learning and remembering more. Monitoring is supportive, proportionate and focused on agreed priorities. Evidence may include discussions with pupils and staff, visits to lessons, review of planning and pupils' work, assessment information and evaluation of interventions. Findings inform the subject action plan, staff development, resourcing and reports to governance.