



"Choose the Right Path"

St James' C of E Infant and Nursery School

Maths Policy

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St James C of E Infant and Nursery School Maths Policy 2025-2026

Aims of this policy

- To ensure a consistent and inclusive approach to the teaching and learning of Mathematics across the school.
- To outline how the Mathematics curriculum is planned, delivered and assessed to support pupil progress from Nursery to Year 2.
- To ensure all staff understand how to support and develop pupils' mathematical knowledge, skills and understanding.
- To promote positive attitudes towards Mathematics, encouraging all pupils to become confident, resilient and enthusiastic learners.

Intent

The Mathematics curriculum at St James CofE Infant and Nursery School aims to develop confident, capable and independent mathematicians who enjoy exploring mathematical ideas and applying their learning to real-life situations.

In Key Stage 1, our curriculum is guided by the aims of the National Curriculum for Mathematics. We aim to ensure that all pupils:

- Become fluent in the fundamentals of Mathematics, developing a secure understanding of mathematical concepts and procedures.
- Develop their ability to reason mathematically by following lines of enquiry, identifying relationships and explaining their thinking.
- Can solve problems by applying their mathematical knowledge and skills to a range of contexts.

In the Early Years Foundation Stage (EYFS), we provide a strong foundation for future mathematical learning through practical experiences, exploration, play and carefully planned adult-led activities. Children develop early number sense, counting, pattern recognition, comparison, spatial awareness and an understanding of shape, space and measure.

We want all pupils to recognise the importance of Mathematics in the wider world and to use their mathematical knowledge confidently in a variety of contexts. We aim to foster curiosity, perseverance and a positive attitude towards challenge, ensuring that all pupils have opportunities to experience success and develop an appreciation of the value and enjoyment of Mathematics.

Implementation

Curriculum planning and progression

To ensure consistency and progression from Nursery to Year 2, the school uses White Rose Maths to structure the Mathematics curriculum. The White Rose sequence supports the development of mathematical knowledge and skills over time, with concepts revisited and built upon as pupils progress through the school.

Teachers use the White Rose progression to support long-term and short-term planning, while adapting and supplementing resources to meet the needs, interests and starting points of pupils in their classes. This ensures that learning is appropriately sequenced, accessible and challenging.

The curriculum is designed to develop secure foundational knowledge before pupils move on to more complex concepts. Links between mathematical topics are made explicit so that pupils can recognise connections and apply their learning in different contexts.

Teaching for mastery

Our approach to teaching Mathematics is informed by the principles of teaching for mastery. We believe that all pupils can achieve and make progress in Mathematics when learning is carefully planned, teaching is responsive and appropriate support and challenge are provided.

The following principles underpin our approach:

- Teachers promote the expectation that all pupils can achieve high standards in Mathematics.
- Learning is carefully sequenced, with sufficient time given to developing a secure understanding of key concepts.
- Teachers identify misconceptions and gaps in understanding promptly and provide additional support to help pupils move forward.
- Mathematical structures and connections are highlighted to develop depth of understanding.
- Lessons include opportunities for practice, consolidation and the application of previously taught knowledge.
- Carefully selected examples and variations help pupils recognise mathematical relationships and develop fluency.
- Classrooms are mistake-friendly environments in which pupils are encouraged to learn from errors, persevere and explain their thinking.
- Teachers use purposeful questioning and ongoing assessment to check understanding and adapt teaching.
- Mathematical vocabulary is modelled and reinforced. Stem sentences and discussion opportunities help pupils articulate their reasoning clearly.
- Key number facts, including number bonds and age-appropriate multiplication facts, are practised regularly to develop fluency and support future learning.

Pupils generally work through a carefully sequenced curriculum, with teachers responding to individual needs through additional support, adapted teaching and suitable challenge. Where pupils require further practice, this is provided to help secure understanding. Pupils who grasp concepts quickly are encouraged to deepen their understanding through reasoning and challenging problem-solving activities rather than simply moving on to new content.

Mathematics in the EYFS

Mathematics is an integral part of learning in Nursery and Reception. Our provision follows the EYFS statutory framework, with particular reference to the area of learning *Mathematics*.

Children develop their mathematical understanding through a combination of play-based learning, practical exploration, adult-led activities and everyday experiences. Staff use observation, questioning, modelling and discussion to extend children's mathematical thinking.

Children are supported to develop:

- A strong understanding of number, including counting, recognising quantities and exploring the composition of numbers.
- An understanding of numerical patterns, including relationships between numbers and the ability to notice, continue and create patterns.
- Mathematical language to compare, describe and explain.
- Early understanding of shape, space and measure through practical experiences and exploration.
- Confidence in applying mathematical ideas to play, routines and real-life situations.

White Rose Maths supports curriculum planning and progression in the EYFS, alongside other appropriate resources and experiences. Activities are adapted to reflect children's developmental stages, interests and emerging needs. Staff build on children's prior knowledge and provide opportunities to revisit and deepen their understanding.

The EYFS curriculum provides the foundations for the more formal mathematical learning developed in Year 1 and Year 2.

Mathematics in Key Stage 1

In Years 1 and 2, teaching follows the National Curriculum for Mathematics. Learning is planned to develop fluency, reasoning and problem-solving skills across the required areas of mathematics.

Teachers use White Rose Maths to structure learning into manageable steps, ensuring that new concepts build on prior knowledge. Practical resources, pictorial representations and abstract recording methods are used to support understanding.

Lessons provide opportunities for pupils to practise skills, explain their reasoning, identify patterns and apply their learning to increasingly varied problems. Teachers make links between topics and encourage pupils to select and use appropriate mathematical strategies independently.

Concrete, pictorial and abstract approaches

When introducing new concepts, teachers provide opportunities for pupils to explore mathematical ideas using concrete resources and manipulatives. These may include counters, cubes, number lines, ten frames, place-value equipment and other appropriate practical materials.

Pupils are also encouraged to use pictorial representations, such as drawings, diagrams, bar models and part-whole models, to represent their thinking and make connections between different mathematical ideas.

These concrete and pictorial approaches support pupils in developing a secure understanding before, and alongside, the use of abstract symbols and methods. Resources remain accessible where they help pupils reason, solve problems and work independently.

Reasoning and problem-solving

Mathematical reasoning and problem-solving are integral to our curriculum. Pupils are encouraged to explain how they reached an answer, justify their choices, identify patterns and relationships, and consider different approaches to a problem.

Teachers model mathematical language and use carefully chosen questions to extend thinking. Stem sentences and structured discussion help pupils communicate their ideas and develop confidence in explaining their reasoning.

Tasks are designed to provide appropriate challenge for all pupils, with opportunities to deepen understanding, make connections and apply learning in unfamiliar contexts.

Inclusion, support and challenge

We recognise that pupils learn at different rates and may require different approaches to develop their mathematical understanding. Teachers use ongoing assessment to identify barriers to learning and adapt teaching and resources accordingly.

Support may include additional modelling, practical resources, visual representations, pre-teaching, guided practice, repetition and targeted intervention. Pupils who demonstrate secure understanding are provided with opportunities to deepen their learning through reasoning, investigation and more complex problems.

Our aim is for every pupil to access an ambitious Mathematics curriculum, make progress from their starting point and develop increasing independence and confidence.

Organisation of Mathematics activities

Mathematical activities are organised flexibly according to the learning intention and the needs of the pupils. Opportunities include:

- Independent work.
- Collaborative learning and paired discussion.
- Large and small group activities.
- Whole-class teaching and discussion.
- Mixed-attainment groupings.
- Targeted groups where appropriate to address specific learning needs.

Teachers select groupings and approaches that best support learning, participation and progress.

Resources and classroom environment

Classrooms have Mathematics working walls or displays that support current learning, reinforce key vocabulary and illustrate important concepts. These are updated regularly to reflect the learning taking place, while useful reference materials may remain available to support pupils' independence.

Practical resources are kept accessible where appropriate so that pupils can select and use them to support their understanding. Resources and representations are chosen carefully to support the mathematical concepts being taught.

Impact

The impact of our Mathematics curriculum is reflected in pupils' developing knowledge, fluency, reasoning and problem-solving skills from Nursery to Year 2.

We aim for pupils to:

- Develop secure mathematical knowledge and understanding appropriate to their age and stage.
- Apply previously learned skills and knowledge to new situations.
- Explain their mathematical thinking using appropriate vocabulary.
- Approach challenges with confidence, resilience and a willingness to learn from mistakes.
- Work independently and collaboratively, recognising and valuing the contributions of others.
- Make progress from their individual starting points and develop positive attitudes towards Mathematics.

Teachers use ongoing assessment to identify pupils' strengths, misconceptions and next steps. This informs future planning, classroom practice and additional support where required.

Leaders use assessment information, work scrutiny, lesson visits and discussions with staff to evaluate the effectiveness of the curriculum, monitor progression and identify areas for further development. These approaches help ensure that pupils receive appropriate support and challenge and are well prepared for the next stage of their education.

Assessment

Assessment is an integral part of teaching and learning in Mathematics at St James CofE Infant and Nursery School. It enables staff to understand pupils' current knowledge, identify misconceptions and plan appropriate next steps.

Assessment approaches include:

- Observations of children's mathematical understanding and application, particularly in the EYFS and during practical activities.
- Questioning and discussion during lessons to check understanding and encourage reasoning.
- Review of pupils' written work, practical tasks and explanations.
- Ongoing formative assessment to identify gaps in knowledge and inform subsequent teaching.
- White Rose Maths end-of-block or end-of-topic assessments, where appropriate.
- NFER assessments in Key Stage 1, where used by the school.
- EYFS assessment and the Early Years Foundation Stage Profile in Reception, in accordance with statutory requirements.
- Optional end-of-Key-Stage-1 assessments, where the school chooses to use them.

Assessment information is used to inform planning, identify pupils who may need additional support and provide suitable challenge for those ready to deepen their understanding. Staff discuss pupil progress and share relevant information to support continuity and progression between year groups.

Policy review

Date of review: November 2027