

Maths Policy 2026

St John Vianney Primary School

Maths Policy



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Statutory Requirements

The mathematics curriculum at St John Vianney follows the statutory requirements of the National Curriculum for mathematics at Key Stages 1 and 2 and the Early Years Foundation Stage statutory framework in Reception.

The National Curriculum requires pupils to develop fluency in the fundamentals of mathematics, reason mathematically and solve problems with increasing sophistication.

The National Curriculum provides the statutory content and expectations for each key stage. Within this framework, St John Vianney has designed and adapted its curriculum to reflect the needs, starting points and context of our pupils.

1. Our Vision for Mathematics

At St John Vianney Catholic Primary School, we believe that mathematics is an essential part of everyday life and a subject through which children learn to think logically, solve problems, communicate ideas and make sense of the world around them.

We want every child to develop a positive and confident attitude towards mathematics and to understand that everyone can be successful mathematicians. We believe that mathematical ability is not fixed and that, with appropriate teaching, practice, encouragement and support, all pupils can make meaningful progress.

Our mathematics curriculum is ambitious for every child. We aim to ensure that pupils develop secure mathematical knowledge and understanding, rather than simply encountering a wide range of mathematical content.

We want our pupils to leave St John Vianney with:

- secure knowledge of number and calculation;
- increasing fluency and accuracy;
- a strong understanding of mathematical concepts and relationships;
- the ability to reason and explain their mathematical thinking;
- confidence in solving familiar and unfamiliar problems;
- the ability to select appropriate methods and representations;
- precise mathematical vocabulary;
- the ability to make connections between different areas of mathematics;
- confidence to make mistakes, identify misconceptions and learn from them;
- positive attitudes towards mathematics and a belief that they can succeed.

We recognise the importance of mathematics beyond school. Pupils are supported to understand how mathematics is used in everyday life, financial decision-making, science, technology, engineering, employment and further education.

2. Aims

Our mathematics curriculum aims to ensure that all pupils:

Develop fluency

Pupils develop secure knowledge of number facts, number relationships, calculation strategies and mathematical procedures. Through regular, purposeful practice, pupils develop increasing accuracy, efficiency and flexibility.

Reason mathematically

Pupils learn to explain their mathematical thinking, justify answers, identify patterns and relationships, make connections, make and test conjectures and use precise mathematical language.

Solve problems

Pupils apply their mathematical knowledge to a wide range of problems, including practical, familiar and unfamiliar contexts. They learn to select appropriate strategies, persevere and reflect on whether their answers are reasonable.

Develop mathematical language

Pupils are taught to understand and use mathematical vocabulary accurately. Mathematical talk is an important part of every lesson, enabling children to explain their thinking and learn from one another.

Build secure understanding over time

Pupils revisit important knowledge and concepts so that learning is retained and can be applied in increasingly sophisticated contexts.

Develop positive attitudes

We encourage curiosity, perseverance, resilience and enjoyment. Children are encouraged to see mistakes and misconceptions as valuable opportunities for learning.

3. Curriculum Design and Progression

Our mathematics curriculum is carefully sequenced from Reception to Year 6 so that new learning builds on previously secured knowledge.

We use Oak Academy mathematics as our curriculum spine. The sequence has been reviewed and reordered by the school to ensure that it meets the needs of our pupils and provides appropriate opportunities for revisiting, consolidation and progression.

Oak Academy is therefore not followed rigidly. Teachers use the agreed SJV curriculum sequence and adapt teaching in response to pupils' prior knowledge, misconceptions and current understanding.

Our curriculum is designed to:

- identify the essential knowledge pupils need to secure;
- break complex concepts into manageable small steps;
- connect new learning to previously taught concepts;
- revisit and retrieve important knowledge;
- provide sufficient opportunities for practice;
- develop conceptual and procedural understanding;
- develop the ability to apply knowledge through reasoning and problem-solving;
- prepare pupils for the next stage of their mathematical learning.

Teachers should not move pupils on simply because a unit has been completed. Progression is based on pupils' security of understanding and readiness for the next stage.

Where pupils require additional time, practice or support, teachers adapt the sequence appropriately.

4. Fluency, Reasoning and Problem-Solving

Fluency, reasoning and problem-solving are interconnected and are developed throughout the mathematics curriculum. Teachers explicitly model problem-solving strategies and gradually develop pupils' independence.

Fluency

Fluency is more than speed. Pupils develop:

- accuracy;
- efficient calculation strategies;
- flexible thinking;
- automatic recall of important facts;
- secure number relationships;
- confidence in selecting appropriate methods.

Regular opportunities for retrieval and practice are built into teaching.

Reasoning

Pupils are taught to:

- explain their thinking;
- justify answers;
- compare methods;
- identify and explain errors;
- spot patterns;

- make connections;
- make and test conjectures;
- generalise mathematical relationships;
- use precise mathematical language.

Reasoning is embedded within everyday mathematics rather than being reserved for occasional reasoning activities.

Problem-solving

Problem-solving is an integral part of our mathematics curriculum. Pupils encounter a range of problem types and are taught how to use their mathematical knowledge to solve them. This includes:

- practical problems;
- one- and multi-step problems;
- missing-number problems;
- comparison problems;
- problems involving multiple representations;
- problems requiring pupils to select an appropriate operation or strategy;
- unfamiliar and non-routine problems.

5. Our Approach to Teaching Mathematics

Mathematics is taught daily throughout the school.

Lessons are structured to ensure that pupils have opportunities to:

- retrieve prior learning;
- learn new mathematical concepts;
- see clear teacher modelling;
- use mathematical representations;
- practise new learning;
- discuss and explain their thinking;
- reason mathematically;
- solve problems;
- consolidate and revisit knowledge.

Teachers use assessment during lessons to identify pupils who have understood the learning, pupils who require further support and pupils who are ready to deepen their understanding.

Teaching is responsive rather than simply moving through a predetermined lesson sequence.

6. Mastery and Mathematical Representations

Our approach is based on developing deep and secure mathematical understanding.

Teachers use concrete resources, pictorial representations and abstract notation purposefully to help pupils understand mathematical concepts and relationships.

Resources may include:

- counters;
- cubes;
- Numicon;
- ten frames;

- part-whole models;
- number lines;
- bead strings;
- Base 10;
- place value counters;
- arrays;
- bar models;
- measuring equipment;
- practical and real-life resources.

Concrete and pictorial representations are not used simply as additional activities. Teachers select representations that help pupils understand the mathematical structure of the concept being taught.

Children are supported to move between different representations and to connect these with mathematical language and abstract notation.

7. Mastering Number

Mastering Number is used daily from Reception to Year 5 to support the development of strong number sense and fluency.

It complements the school's wider mathematics curriculum rather than replacing it.

Mastering Number supports pupils to develop:

- secure counting;
- subitising;
- composition and decomposition of numbers;
- number relationships;
- comparison;
- number facts;
- efficient calculation strategies;
- flexible use of known facts;
- mathematical language;
- confidence with number.

The programme provides a consistent approach to important aspects of number learning across the school.

Teachers use the principles and resources from Mastering Number alongside the school's main curriculum sequence and adapt teaching according to pupils' needs.

8. Calculation

Calculation is taught progressively from Reception to Year 6.

Pupils develop mental calculation strategies alongside increasingly efficient written methods.

Teachers ensure that pupils understand:

- the mathematical structure underlying a calculation;
- why a method works;
- when a method is appropriate;
- how different methods and representations are connected.

Written methods are introduced progressively and are supported by appropriate concrete and pictorial representations.

The school's Calculation Policy sets out the expected progression in calculation methods and supports consistency in teaching, language and representations.

9 Mathematical Vocabulary and Talk

Mathematical language is explicitly taught, modelled, revisited and used throughout the curriculum.

Teachers use precise mathematical vocabulary and expect pupils to use this vocabulary when speaking and writing about mathematics.

Children are given regular opportunities to:

- explain their thinking;
- describe methods;
- justify answers;
- compare strategies;
- identify similarities and differences;
- explain mistakes;
- respond to mathematical questions;
- listen to and build upon the ideas of others.

Teachers use sentence stems, questioning and partner discussion where appropriate to support pupils in articulating mathematical thinking.

We recognise that mathematical language is particularly important for pupils with SEND, pupils who speak English as an additional language and pupils who have gaps in vocabulary

10. Retrieval, Practice and Consolidation

Pupils need regular opportunities to practise and revisit important mathematical knowledge.

Our curriculum therefore includes:

- daily retrieval;
- regular number fact practice;
- opportunities to revisit prior learning;
- arithmetic practice;
- multiplication and division fact practice;
- opportunities to apply previously taught knowledge in new contexts.

Practice is purposeful and carefully selected to support pupils in becoming increasingly secure and fluent.

Teachers consider whether pupils have had sufficient practice before moving on to new learning.

11. Maths Blasts and Fluency Practice

In addition to the daily mathematics lesson, pupils participate in regular fluency and arithmetic practice through **Maths Blasts**.

Maths Blasts provide opportunities to:

- consolidate previously taught learning;
- develop arithmetic fluency;
- practise key number facts;
- revisit calculation strategies;
- address identified gaps;
- develop confidence and efficiency.

Maths Blasts are adapted according to the needs of each year group and class.

In Year 6, arithmetic practice is used to strengthen fluency and prepare pupils to apply their knowledge confidently to increasingly complex calculations

12. Key Mathematical Facts and Home Practice

Key Instant Recall Facts (KIRFs) are used to support pupils in developing automatic recall of important mathematical facts.

These may include:

- number bonds;
- doubles and halves;
- multiplication facts;
- related division facts;
- place-value facts;
- other key mathematical relationships appropriate to each year group.

Home practice is intended to reinforce, rather than replace, high-quality teaching in school.

Digital resources including Times Tables Rock Stars and NumBots are used where appropriate to provide additional opportunities for practice and retrieval.

13. EYFS Mathematics

Mathematics begins in the Early Years Foundation Stage and provides the foundations for pupils' future mathematical learning.

In Reception, mathematics is taught through a combination of:

- explicit teacher-led mathematics;
- daily Mastering Number sessions;
- purposeful adult interaction;
- guided activities;
- carefully planned continuous provision;
- mathematical opportunities indoors and outdoors;
- practical experiences;
- discussion and mathematical language.

The EYFS mathematics curriculum gives particular attention to Number and Numerical Patterns, while recognising that mathematical learning is interconnected with the wider curriculum and children's experiences.

Number

Children develop understanding of:

- counting;
- cardinality;
- subitising;
- comparison;
- composition of number;
- representing numbers;
- number relationships;

- one-to-one correspondence;
- early addition and subtraction;
- doubles and halves;
- patterns in number.

Numerical Patterns

Children develop understanding of:

- repeating and growing patterns;
- counting patterns;
- comparing quantities;
- shape and spatial awareness;
- measures;
- mathematical relationships.

Mathematical language

Adults model precise mathematical vocabulary throughout the day.

Children are encouraged to use mathematical language when playing, exploring, solving problems and talking with adults and peers.

Mathematics in provision

Mathematics is deliberately incorporated into continuous provision rather than being confined to the mathematics area.

Adults use children's interests and play as opportunities to develop mathematical thinking.

Opportunities may include:

- counting and sorting;
- construction;
- shape and spatial reasoning;
- capacity and measure;
- comparing quantities;
- pattern;
- money;
- time;
- positional language;
- outdoor mathematics;
- problem-solving.

Enhancements to provision are planned in response to children's current learning and identified needs.

Adult interaction

Adults model mathematical language, ask purposeful questions, encourage children to explain their thinking and provide appropriate challenge.

They avoid taking over children's problem-solving and instead support children to develop independence and confidence.

Mathematics is supported through the characteristics of effective teaching and learning:

- **Playing and Exploring**
- **Active Learning**
- **Creating and Thinking Critically**

14. Reception Progression and Assessment

The Reception mathematics curriculum is carefully sequenced in small steps.

Teachers consider children's starting points and ensure that important mathematical knowledge is revisited sufficiently for children to become secure.

Particular attention is given to the transition between Reception and Year 1. Reception staff and Year 1 staff work together to ensure that children develop the foundational mathematical knowledge needed for the Key Stage 1 curriculum.

Assessment

Assessment is used to understand what pupils know, remember and can apply and to identify what they need to learn next.

Formative assessment

Teachers continually assess pupils through:

- questioning;
- observation;
- discussion;
- mini-whiteboards;
- practical activities;
- pupil explanations;
- hinge questions;
- analysis of errors;
- independent work;
- live feedback.

Teachers use this information to adapt teaching during and between lessons.

Identifying misconceptions

Teachers actively identify misconceptions and address them promptly. Misconceptions are used as opportunities for mathematical discussion and deeper understanding. Where pupils have not secured prerequisite knowledge, teachers revisit this before expecting pupils to move successfully onto more complex learning.

Summative assessment

Appropriate assessment materials are used at key points throughout the year to provide an overview of pupils' attainment and progress. Assessment information is used alongside teachers' professional knowledge, pupils' classwork and ongoing formative assessment.

Assessment is not used simply to generate data. Its primary purpose is to improve pupils' learning and inform future teaching.

15. Supporting Pupils with Gaps in Learning

Our approach is based on the principle that pupils should **keep up rather than continually catch up**.

Where gaps are identified, teachers respond as quickly as possible through:

- additional modelling;
- further guided practice;
- use of concrete resources;
- pre-teaching;
- retrieval;
- targeted questioning;
- additional practice;
- short-term intervention.

Where pupils require more intensive support, targeted intervention may be provided.

Numberstacks is used as a targeted catch-up intervention to support pupils with identified gaps in mathematical understanding. It provides small-step teaching and practice so that pupils can secure foundational knowledge before progressing.

Intervention is reviewed regularly to ensure that it is addressing the identified need and supporting pupils to access the classroom curriculum.

16. Adaptive Teaching and Inclusion

All pupils are entitled to access an ambitious mathematics curriculum.

Teachers adapt teaching according to pupils' needs while maintaining high expectations.

Adaptations may include:

- additional modelling;
- concrete resources;
- pictorial representations;
- stem sentences;
- vocabulary support;
- pre-teaching;
- additional guided practice;
- targeted questioning;
- carefully selected examples;
- additional processing time;
- small-group teaching;
- appropriate adult support.

Adaptation should remove barriers to learning rather than unnecessarily reducing mathematical ambition.

Pupils with SEND are taught within the mathematics curriculum wherever possible and are supported to develop increasing independence.

Teachers work with the SENDCo and other professionals where appropriate to understand pupils' needs and identify effective strategies.

17 Supporting Disadvantaged Pupils and Equality of Opportunity

Every pupil is entitled to a high-quality mathematics education regardless of their background, starting point, gender, disability, race, religion or socio-economic circumstances.

We recognise that pupils may have different starting points and experiences of mathematics.

Teachers therefore use assessment to identify barriers and provide appropriate support so that pupils can access the same ambitious curriculum.

Particular attention is given to pupils who may have experienced gaps in learning or limited opportunities to develop mathematical experiences outside school.

18. Greater Depth and Challenge

Challenge is provided through deepening understanding, rather than simply accelerating pupils onto content from a higher year group.

Pupils who demonstrate secure understanding may be challenged through:

- reasoning;
- explaining and justifying;
- multiple representations;
- finding different methods;
- identifying errors;
- making connections;
- generalising;
- investigating patterns;
- solving unfamiliar problems;
- proving or disproving statements.

Teachers consider whether pupils have genuinely secured the intended learning before moving them towards greater depth.

19. Real-Life Mathematics and Wider Curriculum Links

Mathematics is used throughout everyday life and across the wider curriculum.

Pupils are given opportunities to apply mathematics in meaningful contexts including:

- money and financial literacy;
- time;
- measurement;
- science;
- geography;
- computing;
- design and technology;
- data handling;
- PE;
- real-life problem-solving.

Where appropriate, pupils learn about the role mathematics plays in different careers and areas of STEM.

20. Resources and Technology

Mathematical resources are selected to support conceptual understanding, fluency and independence.

Resources include concrete manipulatives, pictorial representations, mathematical equipment and appropriate digital technology.

Digital resources used across the school include:

- Oak Academy;
- Mastering Number resources;
- Numberstacks;
- Times Tables Rock Stars;
- NumBots;
- interactive teaching resources.

Technology is used purposefully where it strengthens mathematical learning and provides additional opportunities for practice, retrieval or representation.

21. Teaching Assistants and Other Adults

Teaching assistants and other adults supporting mathematics are given appropriate guidance so that they understand:

- the mathematical concept being taught;
- the school's mathematical vocabulary;
- the representations being used;
- the intended learning;
- appropriate questioning;
- how to provide support without creating dependency.

Adults are encouraged to promote pupils' mathematical thinking and independence rather than simply providing answers.

22. Professional Development

The school recognises the importance of strong mathematical subject knowledge and subject-specific pedagogical knowledge.

Professional development may focus on:

- curriculum progression;

- mathematical concepts;
- representations;
- calculation;
- Mastering Number;
- reasoning and problem-solving;
- effective questioning;
- identifying misconceptions;
- adaptive teaching;
- SEND;
- EYFS mathematics.

The Mathematics Subject Leader works alongside teachers and support staff to develop a consistent understanding of the school's mathematics curriculum.

23. Roles and Responsibilities

The Mathematics Subject Leader:

- leads the development and implementation of the mathematics curriculum;
- maintains a clear overview of curriculum progression;
- supports teachers with planning and teaching;
- promotes high expectations and consistency;
- supports staff in developing mathematical subject knowledge;
- works with the SENDCo and other leaders to support inclusion;
- monitors the quality of mathematics provision;
- evaluates pupils' learning and identifies areas for development;
- supports the effective use of assessment;
- oversees mathematics resources;
- monitors the impact of interventions;
- identifies and provides appropriate professional development;
- reports to SLT and governors as appropriate.

Class teachers:

- deliver the agreed mathematics curriculum;
- plan and teach mathematics responsively;
- assess pupils' understanding;
- identify misconceptions and gaps;
- provide appropriate support and challenge;
- ensure pupils have opportunities to develop fluency, reasoning and problem-solving;
- use mathematical vocabulary accurately;
- maintain high expectations for all pupils.

Learning Support assistants:

- support the planned learning;
 - use agreed mathematical language and representations;
 - encourage pupils to think independently;
 - provide appropriate scaffolding;
 - communicate identified misconceptions or gaps to teachers.
-
- understand that mistakes are part of the learning process.

Parents and carers are encouraged to:

- take an interest in their child's mathematical learning;
- support appropriate home practice;
- encourage children to use mathematics in everyday situations;
- communicate with school where they have questions or concerns.

24. Monitoring, Evaluation and Impact

The impact of the mathematics curriculum is evaluated through a range of evidence.

This may include:

- lesson visits;
- pupil voice;
- work scrutiny;
- assessment information;
- curriculum reviews;
- planning reviews;
- learning walks;
- discussions with teachers and teaching assistants;
- analysis of intervention impact;
- monitoring of disadvantaged pupils and pupils with SEND;
- review of progression across year groups.

Monitoring focuses on what pupils know, understand and can do, as well as the quality of teaching and curriculum implementation.

The Mathematics Subject Leader considers whether:

- pupils are building knowledge over time;
- important knowledge is being retained;
- pupils are developing fluency;
- pupils can reason mathematically;
- pupils can apply their knowledge to solve problems;
- misconceptions are identified and addressed;
- pupils with additional needs are supported appropriately;
- pupils are sufficiently challenged;
- the curriculum is preparing pupils for their next stage of learning.

Findings from monitoring are used to identify strengths, address areas for development and inform future curriculum planning and professional development.

25. What Success Looks Like

The impact of our mathematics curriculum is seen when pupils:

- demonstrate secure mathematical knowledge;
- recall important facts with increasing fluency;
- select appropriate methods;
- explain and justify their thinking;
- use mathematical vocabulary accurately;
- make connections between mathematical concepts;
- apply mathematics to solve problems;
- recognise and learn from errors;
- work with increasing independence;
- demonstrate resilience when mathematics is challenging;
- approach mathematics with confidence and enjoyment.

Ultimately, we want every pupil to leave St John Vianney with a secure mathematical foundation and the confidence to use mathematics successfully in the next stage of their education, their future lives and the wider world.

26. Review

This policy will be reviewed annually by the Mathematics Subject Leader in consultation with the Headteacher and relevant staff.

The policy will be updated where necessary to reflect changes to statutory requirements, curriculum developments, school priorities and the needs of our pupils. can you create me a contents page for this