St Martin's Catholic Primary School

Maths Policy

OUR MISSION STATEMENT

Where children Love to Learn and Learn to Love.

Psalm 25:5 **Lead me in your truth and teach me, for you are the God of my salvation; for you I wait all the day long.**

Intent

St Martin's Catholic Primary School recognises that maths is both a key skill within school, and a life skill to be utilised through everyday experiences. A high-quality maths education provides a firm foundation for understanding how maths is used in everyday life and activities, developing pupils' ability to reason mathematically.

Through the teaching of maths, we aim to develop:

- A positive attitude towards maths and an awareness of the relevance of maths in the real world.
- A process of enquiry and experiment.
- An ability to solve problems and think logically in order to work systematically and accurately.
- An ability to work both independently and in cooperation with others.
- Competence and confidence in pupils' maths knowledge, concepts and skills.
- An appreciation of the creative aspects of maths and an awareness of its aesthetic appeal.

Vision

At St Martin's Catholic Primary School, we have adopted a mastery approach in order to deliver the three aims of the National Curriculum: fluency, reasoning and problem solving. To support our pupils in achieving this, we use the Mastering Number programme and explicitly teach Shape, Space and Measure using the NCETM Progression Charts in Reception. In KS1 and KS2 we use Power Maths. Teachers know which objectives must be taught and assessed in each year group and can follow progressive small steps to ensure pupils have a comprehensive understanding of maths.

We recognise the significant contribution mathematics makes to modern society and consider it to be vital for the life opportunities of our pupils. Our approach aims to provide all pupils with full access to the curriculum. We strive to enable fascination and an excitement to discover mathematical concepts and to broaden pupils' knowledge and understanding of how mathematics is used in the wider world. Our aim is for our pupils to become confident, skilled and resilient mathematicians, who are well equipped to apply their learning to the wider world.

At St Martin's Catholic Primary School, we ensure pupils have transferable mathematical skills, the ability to reason and solve problems and a well-developed vocabulary. We believe that the language of mathematics is international and its importance is universally recognised. We hope our pupils can experience a sense of

awe and wonder as they solve a problem for the first time, discover different solutions and make links between different areas of mathematics. We provide our pupils with the opportunity to explore mathematics using a range of concrete, pictorial and abstract resources (CPA).

Roles and responsibilities

The maths coordinator is responsible for:

- Preparing policy documents and reviewing changes to the national curriculum and advising on their implementation
- Monitoring the learning and teaching of maths, providing support for staff where necessary
- Ensuring the continuity and progression from year group to year group
- Encouraging staff to provide effective learning opportunities for pupils
- Helping to develop colleagues' expertise in the subject
- Organising the deployment of resources
- Liaising with teachers across all phases
- Communicating developments in the subject to all teaching staff
- Leading staff meetings and providing staff members with the appropriate training
- Organising, providing and monitoring CPD opportunities in the subject
- Ensuring common standards are met for recording and assessment
- Advising on the contribution of maths to other curriculum areas
- Collating assessment data and setting new priorities for the development of maths in subsequent years

Classroom teachers are responsible for:

- Acting in accordance with this policy
- Ensuring progression of pupils' mathematical skills, with due regard to the national curriculum
- Planning lessons effectively, ensuring a range of teaching methods are used to cover the content of the national curriculum
- Liaising with the maths coordinator about key topics, resources and supporting individual pupils
- Monitoring the progress of pupils in their class and reporting this on an annual basis
- Reporting any concerns regarding the teaching of the subject to the maths coordinator or a member of the SLT

- Undertaking any training that is necessary in order to effectively teach the subject

Curriculum

Pupils in Tiny Steps follow the Development Matters and Birth to 5 Matters guidance for mathematics – see our Tiny Steps mathematics overview for more detail. Pupils in Reception follow the 2024 EYFS Framework for mathematics, where they are exposed to the three areas: numbers, patterns and connections and spatial reasoning – see our Reception mathematics overview for more detail. Children in Reception should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers. By providing frequent and varied opportunities to build and apply this understanding - such as using manipulatives, including small pebbles and tens frames for organising counting - children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.

Pupils in KS1 and KS2 follow the 2014 National Curriculum for mathematics which sees them undertake a broad and balanced programme that takes account of abilities, aptitudes and physical, emotional and intellectual development. Pupils of all abilities have the opportunity to develop their skills and knowledge in each unit and, through planned progression built into the scheme of work, we offer them an increasing challenge as they move through the year groups – see our progression maps for more detail.

Teaching and learning

The approach to the teaching of mathematics within the school is based on:

- Four Power Maths lessons a week
- Mastering Number four times a week in Reception
- Shape, Space and Measure objectives taught explicitly in the final two weeks of each half term in Reception
- Mastering Number four times a week in KS1 and Years 3, 4 and 5
- Maths fluency through Arithmagician four times a week in Year 6
- Catch-up maths interventions where appropriate (pre or post learning)

- First Class @ Number intervention in Year 2.

We have adopted a mastery maths approach to teaching and learning, where we apply the 'The Teaching for Mastery Five Big Ideas':

1. Coherence
2. Representation and Structure
3. Mathematical Thinking
4. Fluency
5. Variation.

This means that structured questioning is used to ensure that pupils develop fluent technical proficiency and think deeply about the underpinning mathematical concepts, using the appropriate mathematical vocabulary. Focus is put on the development of deep structural knowledge and the ability to make connections, with the aim of ensuring that what is learnt is sustained over time. When pupils are introduced to a key new concept they have the opportunity to build competency as the teachers adopt the following approach:

- Concrete – pupils use concrete objects and manipulatives to help them understand what they are doing.
- Pictorial – pupils build on this concrete approach by using pictorial representations. These representations can then be used to reason and solve problems.
- Abstract – with the foundations firmly laid, pupils move to an abstract approach using numbers and key concepts with confidence. Pupils will be taught to describe key characteristics and associated processes in common language, as well as understand and use technical terminology and specialist vocabulary. Pupils will undertake independent work and will have the opportunity to work in groups and discuss work with fellow classmates.

Resources and displays

A bank of essential, concrete maths resources are stored in each Key Stage so they are easily accessible to use during lessons. Working walls will be utilised and updated regularly, in accordance with the area of maths being taught at the time.

Assessment, recording and reporting

The progress and development of pupils within Reception is assessed against the early learning goals outlined in the 'Statutory framework for the early years foundation stage'. Throughout the year, for KS1 and KS2, teachers will plan on-going assessment opportunities in order to gauge whether pupils have achieved the key learning objectives. Assessment will be undertaken in various forms, including the following:

- Talking to pupils and asking questions
- Discussing pupils' work with them
- Marking work against the learning objectives
- Pupils' self-evaluation of their work
- Formative assessment, which is carried out informally throughout the year. This enables teachers to identify pupils' understanding of subjects and inform their immediate lesson planning.
- Power Maths end of unit assessments
- End of term classroom tests and standardised testing:
    - Year 1: NFER Spring 2 and Summer 2 assessments are completed.
    - Year 2: NFER Autumn 2, Spring 2 and Summer 2 assessments are completed.
    - Year 3: NFER Autumn 2, Spring 2 and Summer 2 assessments are completed.
    - Year 4: NFER Autumn 2, Spring 2 and Summer 2 assessments are completed. In the Summer term, pupils will complete the Multiplication Tables Check (MTC).
    - Year 5: NFER Autumn 2, Spring 2 and Summer 2 assessments are completed.
    - Year 6: During the Autumn and Spring terms, SATs papers from previous years are accessed. In the Summer term, Statutory End of Key Stage Assessments are completed.

Monitoring and review

The maths coordinator will monitor teaching and learning in the subject at the school, ensuring that the content of the national curriculum is covered across all phases of pupils' education.

This policy will be reviewed on an annual basis by the maths coordinator.

Any changes made to this policy will be communicated to all teaching staff.