St Marie's Catholic Primary School

Maths Policy

'The Love of Christ, nurture, guide and inspire us.'

Approving Body	Full Governors Committee Head/Leadership team	**Review Term: 1yr/2yr/3yr** Autumn Spring Summer
Signature:	Chair of the relevant body	**December 23**
Review Date:	**March 24**	**Version:** (applicable if changed within the review period, if no changes this would remain as version 1)

MISSION STATEMENT

'The Love of Christ, nurture, guide and inspire us.'

To do this we will:

- Be a Christian community that lives the Gospel values; 'Love of Christ' (Christ centred)
- Provide opportunities for all to grow and achieve by igniting a desire for learning; 'Guide and inspire' (Education)
- Be a haven of peace and love that enables all to thrive; 'Nurture' (Community)

Objectives: Christ Centred

- Provide high quality collective worship and enriching liturgical celebrations
- Enable our children to acquire an excellent religious education and develop their relationship with God
- Share faith, love and hope in the likeness of Mary, Mother of God
- Provide a safe harbour where all can succeed

Objectives: Education

- Have high expectations of ourselves and others in all that we do
- Value our pupils and staff, appreciating their uniqueness and individual talents, enabling them to achieve well
- Provide a curriculum that opens the world, in all its awe and wonder, to our pupils

Objectives: Community

- Create a peaceful, happy school where all feel welcomed and valued
- Nurture and grow our pupils and community in the Gospel values
- Celebrate each person as a beautiful work of art, created on God's image

St Marie's Key Objectives and Priorities 2023/2024

Key Objectives and Priorities	Success Criteria
Christ at the Centre 1. Priority: Culture	Ensure that staff and pupils are clear on whole school expectations, routines and behaviours Pedagogy, policies and procedures are shared and implemented with fidelity Relationships across the school community become strong Staff seek every opportunity to promote learning within and beyond the school day Pupils and staff have the tools needed to ensure resilience in their learning and wider lives
2. Priority: Aspiration	School has unapologetically high aspiration for our children through a fully understood, common pedagogy All children can access a low floor-high ceiling, fully resourced, holistic curriculum that meets our high aspirations which staff are equipped to deliver Percentage of children at greater depth standards is rapidly closing the gap with national
3. Priority: Resources	The staff structure, skills and knowledge meet the needs of the school 'The curriculum' is fully resourced and meets the needs of our children with effective schemes of work, curriculum knowledge and skills progression maps All staff receive high quality assured CPD that improves learning for all pupils
4. Priority: Community	Parents are well equipped to support children learning in school and at home Families are well supported to meet our aspirations for our children, i.e. through uniform and attendance Our community is well involved in school life, e.g. Parent Council, FAF group etc
5. Priority: Environment	The school building and grounds are a safe place to work and play The buildings and classrooms promote our high aspirations

Maths is a sacred subject

The ultimate purpose of Maths is the pursuit of truth. The thinking skills inherent in the math curriculum should inspire and enable learners to be innovative, creative, critical and analytical learners. Exploring the beauty of mathematics enables all learners to engage with the transcendent dimensions of life, freeing them to be pioneers, trailblazers and the inventors needed today and in the future. The real- world context comes first, and the theory comes second.

Rationale

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.

National Curriculum Aims:

At St Marie's Primary School, we aim to ensure that all pupils, through the objectives of the National Curriculum Programmes of Study, can:

- Become fluent in the fundamentals of mathematics by developing the ability to have a conceptual understanding, good recall skills and to be able to apply knowledge rapidly with increasing accurately.

- Reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language

- Solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing challenge, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

The Mastery Approach

At St Marie's, we teach for mastery, using the 'Power Maths' programme. Children's chances of success are maximised if they develop deep and lasting understanding of mathematical procedures and concepts; to develop mastery in maths, children need to be enabled to acquire a deep understanding of learning, step by step. This builds a solid foundation of deep mathematical understanding.

We aim to deliver and promote the 'five big ideas of teaching for mastery' throughout our Maths curriculum: Coherence, Representation and structure, Mathematical thinking, Fluency and Variation.

Teaching and Learning

Lessons

Practice plays a pivotal role in the Power Maths approach. It takes place in class groups, smaller groups, pairs and independently, so that children always have the opportunities for thinking as well as the models and support they need to practise meaningfully and with understanding. Intelligent practice in Power Maths, practice never equates to the simple repetition of a process. Instead we embrace the concept of intelligent practice, in which all children become fluent in maths through varied, frequent and thoughtful practice that deepens and embeds conceptual understanding in a logical, planned sequence.

All pupils from Reception to Year 6, have a dedicated daily Maths lesson which equates to approximately 1 hour each day. Our lessons follow the same daily structure and are split into 5 parts, with an additional starter activity (Power Up). This ensures consistency, continuity and progression across Key Stages.

Power Up - supports fluency in key number facts.

1. Discover - A practical, real-life problem arouses curiosity. Children find the maths through story-telling.
2. Share - Teacher-led, this interactive section follows the Discover activity and highlights the variety of methods that can be used to solve a single problem
3. Think together - Children work in groups on the carpet or at tables, using their textbooks or eBooks
4. Practice - Using their Practice Books, children work independently
5. Reflect - The Reflect section is your opportunity to check how deeply children understand the target concept.

Lessons in Reception adopt these same aspects of learning, however the sequence is delivered over a number of days, rather than daily. Flexibility is built into our lessons, so when necessary, mapping of lessons can be adapted, meaning teachers can pace their teaching according to the class.

Resources

Each class has access to resources applicable to their learning objectives which complement and support the delivery of the Concrete-Pictorial-Abstract approach to mastery.

Depth and breadth

Just as prescribed in the National Curriculum, the goal of our lessons is never to accelerate through a topic but rather to gain a clear, deep and broad understanding.

“Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.”

National Curriculum: Mathematics programmes of study: KS1 & 2, 2013

Growth Mind-set

Global research and best practice deliver the same message: learning is greatly affected by what learners perceive they can or cannot do. What is more, it is also shaped by what their parents, carers and teachers perceive they can do. Mind-set (the thinking that determines our beliefs and behaviours) therefore has a fundamental impact on teaching and learning, especially in maths. We ensure that our lessons provide opportunities for children to develop a growth mind-set through:

- Opportunities to make and learn from mistakes.
- Building in opportunities for success through the step-by-step approach
- Using growth phrases, such as, 'Mistakes can help you learn'.
- Praise hard work and determination

Mathematical Vocabulary

When children learn to talk purposefully together about maths, barriers of fear and anxiety are broken down and they grow in confidence, skills and understanding. Building a healthy culture of 'maths talk' empowers their learning from day one.

At St Marie's, we aim to promote children's confidence, ability and understanding of Mathematical language and vocabulary through:

- Encouraging children to use full sentences, not just words, when reasoning, explaining or discussing maths.
- Working with others in pairs, groups or as a whole class to support maths talk and discussion.
- Provide clear opportunities within each lesson for children to think and reflect, so that their talk is purposeful, relevant and focused.
- Precise and consistent when using mathematical vocabulary.
- Use stem sentence and encourage children to repeat them frequently, whether working independently or with others.
- New terms used in a lesson are never introduced without a clear explanation.
- Mathematical signs are used early on so that children quickly become familiar with them and their meaning.

Marking and Feedback

In all areas of marking we aim to implement a consistent approach adhering to the schools marking policy. Marking can take shape in various forms in maths including: verbal feedback, ticks and positive comments, self and peer marking, next step marking and addressing misconceptions.

Assessment

Formative Assessment

Teaching for mastery demands that teachers are confident about what each child knows and where their misconceptions lie: therefore, practical and effective assessment is vitally important. Within lessons, formative assessment includes identifying and addressing misconceptions, providing support or further explanation when necessary and effective questioning. The Power check allows children to self-assess their level of confidence on the topic by colouring in different smiley faces.

Summative Assessment

In Maths, each unit concludes with a summative check which helps to assess quickly and clearly each child's understanding, fluency, reasoning and problem-solving skills. Half-termly tests are administered to assess children's progress against the units covered and to inform next steps. The school's progress tracking system is updated termly. Summative assessments take place towards the end of the school year to assess and review pupil's progress and attainment against the National Curriculum descriptors. These are through compulsory National Curriculum Mathematics tests in Year 2 and Year 6 and are supplemented by Power Maths and NFER assessments in other year groups.

Equal opportunities

At St. Marie's we believe that all pupils, irrespective of gender, ability, ethnic or cultural origins, should have equal access to all parts of the curriculum. It is the responsibility of the teacher to ensure that all children are challenged at a level appropriate to their ability; including those with Special Education Needs and those who are identified as More Able. Daily maths lessons are inclusive of pupils with SEND through adaptation, support and IEP targets. More Able pupils should be ''offered rich and sophisticated problems before any acceleration through new content'' including Power Puzzles and Deepen Activities.