Mathematics at St Mary Magdalene Catholic Primary School

Developing confident, curious and successful mathematicians

At St Mary Magdalene Catholic Primary School, we believe that every child has the potential to succeed in mathematics. Our aim is to inspire a love of learning, develop mathematical confidence and equip children with the essential knowledge and skills they need for everyday life.

We recognise that mathematics is much more than calculations. It encourages logical thinking, problem-solving, perseverance and creativity. Through an engaging and challenging curriculum, we provide opportunities for all children to explore mathematical concepts, explain their reasoning and apply their knowledge in meaningful situations.

Our approach is rooted in the belief that every child can achieve success in mathematics with appropriate support, encouragement and challenge.

Our Curriculum Intent

We aim to develop enthusiastic, independent and resilient mathematicians who enjoy exploring numbers, patterns and mathematical relationships. Our mathematics curriculum is designed to ensure that children:

- Develop secure mathematical knowledge and understanding.
- Become fluent and confident in mental and written calculations.
- Apply mathematical skills to solve problems in familiar and unfamiliar contexts.
- Explain their thinking using accurate mathematical vocabulary.
- Develop reasoning skills and justify their answers.
- Recognise the importance of mathematics in everyday life.
- Approach challenges with determination, curiosity and a positive attitude.

We follow a mastery approach, allowing children to develop a deep and secure understanding of mathematical concepts before progressing to more complex learning.

How We Teach Mathematics – Implementation

Mathematics is an important part of our daily learning at St Mary Magdalene. Our curriculum is carefully sequenced to ensure children build upon their previous knowledge as they progress through the school.

We provide six mathematics lessons each week, complemented by regular Basic Skills and Big Maths activities to strengthen mathematical fluency and consolidate essential number skills.

- **Practical learning:** Using concrete resources and visual representations to develop understanding.
- **Mathematical fluency:** Developing confidence, speed and accuracy in calculations.
- **Reasoning:** Encouraging children to explain, justify and discuss mathematical ideas.
- **Problem-solving:** Applying mathematical knowledge to increasingly challenging situations.
- **Challenge and support:** Providing appropriate scaffolding, additional practice and opportunities for deeper thinking.
- **Real-life mathematics:** Helping children understand how mathematics is used beyond the classroom.

Children are encouraged to explore different strategies, learn from mistakes and develop independence in their mathematical thinking.

DreamBox Maths – Personalised Learning for Every Child

A new and exciting approach to closing gaps in numeracy

We are delighted to introduce DreamBox Maths, an innovative online learning programme designed to support and enhance children's mathematical development.

DreamBox uses adaptive technology to personalise learning according to each child's individual needs. As children complete activities, the programme responds to their answers and strategies, adjusting the level of challenge and support.

This means that children can revisit concepts they have not yet fully understood while continuing to develop new mathematical skills at an appropriate pace.

How DreamBox supports our pupils

- **Identifies and addresses learning gaps:** Provides opportunities to revisit and strengthen mathematical concepts requiring further consolidation.
- **Personalised learning:** Adapts lessons to suit each child's understanding and progress.
- **Builds confidence:** Allows children to work at their own pace and experience success.
- **Develops fluency:** Strengthens number sense, calculation skills and mathematical understanding.
- **Encourages independence:** Children actively engage in their learning and develop problem-solving strategies.
- **Supports teachers:** Provides useful information about children's learning, helping teachers identify areas requiring additional support.

DreamBox complements our classroom teaching and targeted interventions. It is an additional tool to help ensure that every child has the opportunity to make progress.

Supporting DreamBox Learning at Home

We encourage parents and carers to support their children's mathematical development by allowing regular access to DreamBox at home.

Our recommended minimum is five DreamBox lessons each week.

Regular engagement helps children consolidate their learning, revisit areas of difficulty and develop greater confidence in mathematics. DreamBox offers an additional opportunity for personalised mathematical practice beyond the classroom.

Assessment and Progress

Assessment is an essential part of our approach to teaching mathematics. Teachers continually assess children's understanding through classroom discussions, observations, questioning and independent activities. More formal assessments take place at the end of topics and throughout the academic year.

- Identify strengths and areas requiring further development.
- Address misconceptions promptly.
- Plan targeted interventions and additional support.
- Provide appropriate challenge for all learners.

- Monitor individual progress and celebrate achievements.

Information from DreamBox provides an additional insight into pupils' mathematical understanding and helps inform future teaching and support.

Inclusion – Mathematics for Everyone

At St Mary Magdalene, we are committed to providing an inclusive mathematics curriculum where every child feels valued, supported and challenged.

We recognise that children learn in different ways and at different rates. Teachers adapt their teaching through practical resources, visual representations, targeted questioning and carefully planned support.

Children who require additional help receive opportunities to revisit and consolidate essential concepts, while those who demonstrate secure understanding are encouraged to deepen their reasoning through more challenging problems.

Our aim is to ensure that all children develop confidence, experience success and achieve their mathematical potential.

The Impact of Our Mathematics Curriculum

Through our carefully planned mathematics curriculum, we aspire for children to leave St Mary Magdalene as confident, capable and enthusiastic mathematicians. We want our pupils to:

- Demonstrate secure mathematical knowledge and fluency.
- Apply their understanding to a wide range of problems.
- Explain their reasoning clearly and confidently.
- Work independently and collaboratively.
- Show resilience when faced with mathematical challenges.
- Recognise the importance of mathematics in everyday life.
- Develop a positive attitude towards mathematics that continues into secondary education and beyond.

We monitor the effectiveness of our curriculum through assessments, children's work, pupil discussions and regular evaluation of teaching and learning.

Working Together with Parents and Carers

We value the important role families play in supporting children's mathematical development. Parents and carers can make a significant difference by encouraging regular practice, discussing mathematics in everyday situations and celebrating their children's achievements.

- Support regular engagement with DreamBox Maths.
- Practise multiplication tables and basic number facts.
- Involve children in everyday mathematics, such as shopping, measuring, cooking and telling the time.
- Encourage children to explain how they have reached an answer.
- Promote a positive attitude towards mathematical challenges.

Together, we can help every child become a confident, enthusiastic and successful mathematician.

At St Mary Magdalene Catholic Primary School, we believe that mathematics opens doors to opportunities, develops essential life skills and empowers every child to achieve their full potential.