

# St Mary and St Michael Catholic Primary School



***“Learning together as we follow in the  
footsteps of Christ”***

## Maths Policy

Reviewed: May 2024  
Update: May 2026

## Intent

At St Mary and St Michael Catholic Primary School, we place our children at the heart of everything we do and offer them an engaging Maths curriculum where every child has the right to high quality teaching and learning opportunities that help them develop essential mental and written maths skills.

Our aim is to engender an enjoyment of mathematics, enabling our children to gain a secure and deep understanding of fundamental mathematical concepts and procedures in preparation for Key stage 3 and beyond. We want our children to see the mathematics that surrounds them every day and enjoy developing vital life skills in this subject.

### **Statutory Requirements**

Statutory requirements for the teaching and learning of Maths are laid out in the Bailiwick of Guernsey Curriculum and in the Development Matters document for Early Years.

### **Maths Bailiwick Curriculum Aims**

- To ensure learners build a secure knowledge of the range of ways mathematics can solve practical problems, model situations, make sense of data and inform decision making.
- A secure knowledge of different types of numbers and what they represent.
- Understand how numbers can be used for measurement, quantification and comparison and applied to different contexts.
- How to use geometry to explore, understand and represent shape and space.
- Understand how likelihood and risk can be understood, quantified and used in everyday life.

## Implementation and Impact

Maths is a core subject of the Bailiwick of Guernsey curriculum. Pupils take part in daily Maths lessons where children are introduced to the process of written calculation through practical, pictorial, oral and abstract activities. These cover the programmes of study for Maths set out in the Bailiwick of Guernsey Curriculum and Development Matters document for Early Years. Further opportunities are given for pupils to practise and apply their maths skills in other areas of the curriculum wherever possible. The following gives information on how each of these areas are implemented across our school:

### **Maths in Early Years**

The EYFS Framework identifies three characteristics of effective learning. The class teacher plans activities with these characteristics in mind:

- playing and exploring - children investigate and experience things, and 'have a go'
- active learning - children concentrate and keep on trying if they encounter difficulties, and enjoy achievements
- creating and thinking critically - children have and develop their own ideas, make links between ideas, and develop strategies for doing things.

In Maths children are given short inputs using practical and visual resources. We follow and make adaptations to 'Master the Curriculum,' in accordance with their individual needs. The children will then complete a maths challenge in small groups, supported by the class teacher. The children are able to build on the skills learnt in the inputs through enhanced provision throughout the environment and through use of the Maths resources area. Planned maths challenges are offered during continuous provision. These are based on the children's prior learning to help consolidation and ensure it has moved to the long-term memory.

In addition to the Maths lessons taken from Master the Curriculum, our EYFS class also follow the Early Years Number Sense Programme in order to develop their knowledge of quantity and numbers to 10.

## **Curriculum design and planning for Maths in Years 1-6**

In November 2022, St Mary and St Michael began using the White Rose Maths Scheme of Learning as a blue-print to develop a coherent and comprehensive conceptual pathway for mathematics throughout the school. A focus of the White Rose scheme is mastery of mathematics. Teaching for mastery promotes the idea that all pupils should develop a deep understanding of the mathematics they are learning as opposed to accelerating through curriculum content. All teachers in Key Stage 1 use a concrete-pictorial-abstract model of teaching. This continues into Key Stage 2, although there is a recognition that the concrete step may not always be essential for some learners as their understanding of mathematical concepts matures.

Using the White Rose progressive small steps, the whole class work together on the same key idea ensuring that no child is left behind. Staff encourage a Growth Mindset 'can do attitude' for all children regardless of mathematical ability. Our aim is for all children to develop a deep and sustainable understanding of a key mathematical idea rather than accelerating beyond this. In this way, we believe pupils will become true masters of mathematics, applying their knowledge and reasoning with it in a range of contexts. The White Rose Maths scheme supports our aim and also covers and exceeds the requirements of the Bailiwick of Guernsey Curriculum. We believe the White Rose Maths scheme provides robust support for staff in planning Maths lessons:

- the scheme learning is broken down into small, connected steps, building on what pupils already know.
- It identifies difficult points and potential misconceptions so teachers can identify in advance strategies to address them.
- It provides examples of key questions which challenge thinking and develop learning for all pupils.
- High quality pictorial resources are provided to develop reasoning skills and to help pupils link pictorial ideas to abstract mathematical concepts.

The calculation policy provided by White Rose that gives a detailed overview of the steps and development of written skills is included as a PDF document in the appendices at the end of this policy.

In addition to the teaching of White Rose Maths, the Early Years Number Sense, Number Facts Fluency and Times Tables Fluency programmes are used to support development of key mental mathematics concepts. Early Years Number Sense is taught in Early Years, Number Facts Fluency is taught from Year 1 until the end of Autumn Term in Year 3. Times Tables Fluency is taught from Spring Term in Year 3 until the end of Year 4, with consolidation lessons taking place in Year 5 and 6. Children who did not start the programme in Year 3 due to it being introduced later in their schooling continue to work through the programme in KS2 until it has been completed.

## **By the time children leave our school, in Maths, we aim for our children to...**

- Have a positive attitude towards mathematics which builds self-confidence to tackle new challenges beyond primary school.
- Have a secure knowledge of number facts and a good understanding of the four operations of addition, subtraction, multiplication and division.
- Be able to use this knowledge and understanding to carry out calculations mentally and to apply general strategies when using the four operations.
- Be able to work systematically, co-operatively and with perseverance.
- Be able to think logically and independently.
- Make use of diagrams and informal notes (jottings) to help record steps and part answers when using mental methods that generate more information than can be kept in their heads.
- Have an efficient, reliable, compact written method of calculation for each operation that children can apply with confidence when undertaking calculations that they cannot carry out mentally.

- Use a calculator appropriately and effectively, using their mental skills to monitor the process, check the steps involved and decide if the numbers displayed make sense.
- Be able to communicate with peers and adults clearly and fluently, using the appropriate mathematical language ideas, experiences and questions.
- Have equality of opportunity regardless of race, gender, or ability.

## Teaching and delivery of mathematics

### Teaching duration

To provide adequate time for developing mathematical skills, each class teacher will provide a daily mathematics lesson. This may vary in length but will usually last for about 45 minutes in Key Stage 1 and 50 to 60 minutes in Key Stage 2. When children start in Early Years, they will receive a shorter daily Maths input, with activities to show their understanding set out as part of continuous provision.

### A typical lesson

A typical 45 to 60 minute lesson in Year 1 to 6 will usually be structured to include:

- Oral work and mental calculation or retrieval activities (from 5 to 15 minutes) This will involve whole-class or small group work to rehearse, sharpen and develop mental and oral skills.
- The main teaching activity (about 30 to 40 minutes) This will include both teaching input and pupil activities and a balance between whole class, grouped, paired and individual work.
- A plenary (about 5 to 10 minutes) This will involve work with the whole class to address any misconceptions, give feedback, identify progress, summarise key facts and ideas and to make links to other work and discuss next steps.

The teaching of mathematics at St Mary and St Michael provides opportunities for:

- Group work
- Paired work
- Whole class teaching
- Individual work

Pupils engage in:

- The development of mental strategies
- Written methods
- Practical work
- Investigational work
- Problem- solving
- Mathematical discussion
- Consolidation of basic skills and routines

### Planning

Long term and medium term planning for each year group from Y1-Y6 is taken from the White Rose Maths programme. This planning covers the skills progression in The Bailiwick of Guernsey Big Picture Curriculum. In consultation with the Guernsey Education Officer assigned to our school, it was agreed that as White Rose Maths follows the UK National Curriculum it will cover all aspects of the Guernsey curriculum *and in some areas exceed its requirements*. In Early Years, the Long Term and Daily planning is taken from Master the Curriculum.

Short Term planning is produced by teachers weekly on the school's Maths planning format and is stored on Google Drive for ease of monitoring by the subject leader and SLT. Starter activities usually involve using the White Rose Maths

scheme (to consolidate the previous day's lesson), practising times tables facts from the Times Tables Fluency programme or lessons from the Number Sense scheme. Teachers may also use starters to review content from previous units of work that has been flagged up from assessment tasks.

Teacher lesson inputs are taken from the White Rose Maths small steps of learning. Challenges for children to complete in lessons are either planned by the teacher or the White Rose materials are used to allow children to demonstrate their understanding of the lesson input. Teachers have the class working on the same challenge and differentiate by the level of support or resources offered. Teachers also provide extension challenges so the children can consolidate and master concepts thoroughly by applying their recent learning and tackling problem solving tasks.

## **Assessment, recording and reporting**

Pupils are formatively assessed daily during lessons, with teachers noting pupils requiring further support and pupils that are struggling with certain concepts.

Summative assessment takes place through using the Ready to Progress Bailiwick grids (as of September 2023). Teachers will undertake both formative and summative assessments so they can judge whether a child has mastered a concept and is ready to move to the next stage. White Rose Maths End of Block and End of Term Assessments are used to support judgements against the Ready to Progress criteria and to enable staff to plan in additional coverage of any concepts that are proving challenging. At the end of each academic year teachers report on three areas of maths: Number facts; understanding and applying of number and geometry.

The Maths Subject Leader and SLT meet termly to review progress across the school and plan in tailored support and interventions (staff allowing) for those children that are experiencing difficulty in grasping some concepts.

Assessment levels are triangulated by online testing using GL Assessment in the summer term.

## **Reporting**

Progress in Maths is discussed at Parents' Evening in the Autumn and Spring Terms.

All parents receive an annual written report on which there is a summary of their child's attainment in maths over the year.

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## **Appendix 1**



Maths addition and subtraction calculati

## **Appendix 2**



Maths multiplication and d