St. Patrick's Catholic Primary School

Maths Policy

Written by	Updated
Senior leadership team and Curriculum leader for Maths	April 2025

The National Curriculum states that:

"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."

Following the introduction of the new National Curriculum in 2014 the emphasis has been to ensure that all children:

 Become FLUENT

 REASON and EXPLAIN mathematically

 Can SOLVE PROBLEMS

This means that children need to be regularly exposed to opportunities involving increasingly complex problem solving which allows them to apply their Maths knowledge. In doing so they should be encouraged to develop an argument and line of enquiry which they can prove and justify using mathematical vocabulary. This includes the ability to break down problems, both routine and non routine, into a series of steps.

Intent

At St Patrick's RC Primary School we have adopted a mastery approach for the teaching of mathematics, following the White Rose Maths scheme of work. Underpinning this pedagogy is the belief that all children can achieve in maths. We believe in promoting sustained and deepened understanding by employing a variety of mastery strategies, with teaching for conceptual understanding at the heart of everything we do. We aim to create independent mathematicians who are well equipped to apply their learning to the wider world.

Teaching for Mastery aims to provide all children with full access to the curriculum, enabling them to achieve confidence and competence – 'mastery' – in mathematics, rather than many failing to develop the maths skills they need for the future.

Key features of our Maths Mastery curriculum:

- High expectations for every child
- Fewer topics, greater depth
- Number sense and place value come first
- Research -based curriculum
- Objects and pictures always before numbers and letters
- Problem solving is central
- Calculate with confidence– understand why it works

Mathematics Mastery places emphasis on the cumulative mastery of essential knowledge and skills in mathematics. It embeds a deeper understanding of maths by utilising a concrete, pictorial, abstract approach so that pupils understand what they are doing rather than just learning to repeat routines without grasping what is happening. St Patrick's mastery curriculum is taught using the 'White Rose Maths' scheme of learning.

Implement

Planning

The Early Years foundation stage follow the development matters framework alongside the Early learning goals. In addition, in F2 they use the White Rose scheme of work. F1 and F2 work within the Early Learning Goals and continuous assessment is recorded on Foundation Stage Profiles.

Early Years foundation stage plan group work and continuous provision activities linked to their focus. Reception, Year 1 and Year 2 classes have a daily 10-15 min basic skills sessions combined with a maths specific lesson. Year 3 and 4 classes have a daily 10-15 min maths skills sessions (key facts and times tables) combined with a daily maths specific session. Year 5 and 6 classes have a daily 10-15 min arithmetic session combined with a daily maths specific session. Other opportunities throughout the week are sought to practice times tables regularly using times tables rock stars and other resources.

In Key Stage 1 and 2, units of work are planned for from the White Rose scheme of work and are complemented by other resources. All teachers are responsible for developing weekly plans using their own choice of proforma. These plans indicate the learning objectives for each lesson along with activities, which clearly show progression. Clear differentiation is built into weekly plans and the needs of all children are planned for, including those with Special Educational needs and more able children.

Daily lessons (Year 1 to Year 6) should follow the below lesson format:

- Flash back to recall previous knowledge from previous year groups, month, week or day (this can be completed in books, verbally or on whiteboards)
- Get ready (this can be completed in books, verbally or on whiteboards)
- New learning (this can be completed in books, verbally or on whiteboards
- Reasoning and problem solving application (this can be completed in books, verbally or on whiteboards)
- 3 tasks are set for the pupils- fluency, reasoning and problem solving and challenge questions for greater depth pupils to explore deeper thinking about the area. The three tasks should be clearly labelled at Task 1- Fluency, Task 2- Reasoning and Problem solving and Task 3- Greater Depth.
- Sheets should only be used in books if it enhances the learning and is deemed a necessity

Presentation

Pre learning activities should be completed before the start of each unit of work and a post learning activity should be completed at the end of a unit of work.

The date and learning objective should be written or stuck in to indicate the new day's learning. If the parts of the lessons are written in books, they should be clearly labelled. Independent tasks should be labelled as Task 1- Fluency, Task 2- Reasoning and Problem solving and Task 3- Greater Depth. Sheets should only be stuck in children's book if it enhances learning and is deemed a necessity.

Children should be taught to use the squares for individual numbers. Adults should identify in children's books when this is not done and allow time for children to correct this. If a written answer is necessary, children should use the lines in books and from Y3 upwards the writing should be cursive.

In Key stage 2, pupils should fold the page in half and work down the page.

Marking and Feedback

At St Patrick's, we believe that marking is about responding appropriately to children's work. Evidence of this response can be found in pupils' books and on display, but much of the Foundation Stage and Key Stage 1 work is practical and much of the response is verbal. A great deal of verbal praise is given. Staff use their professional judgement in a constructive way when working with young learners to take them forward. From the evidence of the pupil's performance in all aspects of the curriculum, staff ask:

What does it tell us?

How can we use it?

What are we going to do next?

The purpose of our marking is to:

- Provide feedback to aid learning
- Give direction towards the next step in learning
- Achieve continuity in our responses throughout the school

Marking

- is carried out regularly
- may indicate strengths and areas for development
- is accompanied by verbal support and positive body language
- shows that the pupil's work is valued and provides opportunities for praise
- plays an integral part in classroom activities
- informs future planning and sets targets
- is consistent throughout the school
- will inform parents and other staff
- will relate to the intention of the lesson
- ensure any comments are in the handwriting style of the school
- Show that the teacher has reviewed the work

EEF 'There is little high quality research to suggest that extensive or detailed marking has any significant impact on learning'

Please see the Marking and Feedback policy for further details

Teaching and Learning

Teaching Strategies (Quality First Teaching)

Each of us is unique in the way we experience life and respond to events. There are as many different ways of learning as there are children in our classroom. Because of this we need to use a range of teaching methods to try and ensure 'personalised learning'. We are committed to 'Quality First teaching', where we meet the needs of every child.

The strategies used in our school are:-

Whole class teaching Talk less teaching

Challenge and support	Think, pair, share. Peer marking.
Paired learning	Self assessment.
Team / Group learning	Practical activities / creativity
Individual learning	Investigative / problem solving
Open questions	Exposition / modelling
Closed questions	Real life thinking / problems

Indoor and Outdoor learning and teaching

It is seen as very important to employ a wide range of teaching strategies. However, emphasis is placed on direct teaching, demonstrating, modelling methods and strategies to be learnt, and the use of skilful questioning in order to develop understanding. Children are taught throughout the year groups using conceptual, pictorial and abstract methods.

Children are encouraged to record their methods in writing and are taught both informal and formal ways to achieve this. We aim for all children to be competent in using standard methods by the end of Key Stage 2. All children by Year 4 should be fluent in times tables up to x12 and equivalent division facts.

Children are given regular opportunities to apply their knowledge and understanding to problem solving and investigating, where they are encouraged to make estimations and predictions and present information clearly.

Children are given regular opportunities to practice and develop their mental skills, including counting, rapid recall of number facts and calculation strategies.

The development of oral communication skills and a rich mathematical vocabulary is nurtured through encouraging children to talk about their methods and strategies with each other as well as their teacher and parents.

Each classroom has a maths display which contains key vocabulary, resources which the children can use, year group methods for arithmetic and a working wall of new concepts and skills.

Homework

Homework is provided as a way of consolidating learning and to engage parents in their child's education. In Maths, weekly arithmetic homework is set to consolidate and practice these skills.

Parental involvement

Parent workshops of offered throughout the year. Parents meetings are held twice a year. During this meeting, parents are advised on areas of maths which their child needs to work on. At the end of the year, assessments are reported to parents through the end of school year report.

IMPACT

Assessment (Formative and Summative)

Assessment for Learning (Formative assessment) is the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there.

Within our school, staff are knowledgeable and skilled users of strategies for day-to-day assessment in the classroom including:

- Questioning
- Observing
- Discussing
- Analysis of work
- Checking children's understanding (Pre-teach tasks)

Assessment is used to inform medium and short term planning and children are engaged in the assessment of their own learning. Daily assessments of children are made and those identified as needing extra support are given interventions on the same or the following day.

Regular teacher assessments of children's progress are made against the national curriculum. At the start and end of each block of learning an assessment is completed to assess what is known in the beginning and at the end.

In Early Years Foundation Stage pupil's summative assessments are completed at the end of each term. It is recorded that pupils are either 'On track' or 'Not on track'. Pupils are assessed in Nursery against the 7 specific and prime areas of learning and in Reception against the 17 early learning goals.

STAR maths assessments are used termly, for summative assessments to assess the knowledge of the pupils across all the maths curriculum. This assessment is used to plan for support. At the end of Key stage 2 formal statutory assessments are completed. In Key stage 1 and Key stage 2 classes' end of year assessments are completed, an analysis is made based on the end of year assessment and appropriate targets are set by the teachers for the following year.

Those children who are not achieving the expected level are identified at an early stage and targeted for extra support or an intervention programme delivered by support staff.

At the end of the Advent and Pentecost term, the children are assessed against year group objectives and data is input onto Arbor. Children are assessed as one of the below criteria

Below the standard (BLW)

Working towards the standard (WTS)

At the expected standard (EXP)

Above the expected standard (GD)

The role of the Maths subject leader:

- Ensuring this policy is successfully implemented
- Being available to support staff with maths
- Regularly conducting book looks, learning walks and pupil interviews to monitor writing across school
- Provide feedback to staff following monitoring
- Provide updates to link governors
- Identify developments with the subject area