



# Using Mathematics Policy – St Mary's Primary School Aughnacloy



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and appreciate the beauty in our world.*

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## Introduction

At St Mary's, we are proud to offer a numeracy curriculum that is both purposeful and flexible, designed to actively engage our pupils in meaningful mathematical learning experiences. Our aim is to assist every child in achieving their full potential across the key areas of Processes in Mathematics, Number, Measures, Shape and Space, and Data Handling. Through a carefully planned and inclusive programme, we equip our learners with the skills and competencies they need to succeed in numeracy and apply their understanding confidently in everyday life.

We place equal emphasis on wellbeing, knowledge, understanding, and skills within numeracy, recognising that confident, resilient learners thrive in environments where they feel safe, supported, and valued. At the heart of our approach to numeracy teaching is a commitment to creating a caring and inclusive atmosphere, where numeracy is celebrated and where each pupil is empowered to flourish across all areas of numeracy.

Our goal is to empower each child to grow and fulfil their potential in numeracy equipping them with the capacity to live purposeful lives and make a valuable contribution to broader society, with a strong sense of wellbeing all the whilst harbouring both confidence in numeracy and a positive relationship with numeracy.

Through our numeracy policy, we endeavour to build confident, capable learners who are ready to embrace the challenges and opportunities of the world around them.

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### **Aims of Using Mathematics:**

At St Mary's PS Aughnacloy we view mathematics as a powerful tool for understanding the world. Our curriculum is designed to help children develop confidence and fluency in calculating, reasoning, and solving problems, laying the foundation for lifelong learning.

Through exploring number, data, processes, pattern, shape and space, pupils begin to see how mathematics is woven into everyday life. We encourage curiosity and creativity, helping learners make connections and appreciate the beauty, logic and structure of mathematical thinking, mathematical ideas and mathematics as an entity, that permeates all areas of school and life.

The aims of mathematics and numeracy are:

- To promote enjoyment and enthusiasm for learning through practical activity, exploration and discussion.
- To develop logical thinking and reasoning skills through a natural curiosity and investigative approach.
- To promote confidence and competence so that children take great pleasure in their achievements.
- To develop a thorough knowledge and understanding of numbers and the number system.
- To develop the ability to solve problems through decision-making and reasoning in a range of contexts.
- To develop a practical understanding of the ways in which information is gathered and presented.
- To explore features of shape and space, and develop measuring skills in a range of contexts.
- To understand the importance of mathematical skills in everyday life.

### **Teaching and learning style**

The teachers in St Mary's PS Aughnacloy employ the use of a varied approach to teaching in their mathematics lessons taking account of the fact that pupils learn in different ways and have different preferred learning styles. The types / methods of teaching in St Mary's includes whole class, group and individual, teaching, learning and work; This teaching, learning and work engages the children in practical and investigative tasks as appropriate to enhance and maximise the pupils' learning. These teaching styles and activities are then complemented by written work linked to the topic at hand on the given day. Teaching and learning is supported by the Heineman Active Maths Scheme as well as the New Heinemann maths scheme and Rapid Maths for struggling learners in respect primarily to number. These are 'activity led' maths programmes that aim to ensure children learn new concepts in a concrete way. The children's work is differentiated where appropriate and as needed. This allows all the children

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to have the opportunity to access the curriculum at the appropriate individual level for themselves and indeed learn and make optimal progress at their own speed and level, learning effectively, making appropriate progress and achieving success. Children also engage in daily mental maths lessons under the school's number fluency programme adaption, focusing on the seven mental maths strategies of re-ordering, partitioning, using equivalence, using factors, inverse operations, rounding and adjusting and counting on and back. These mental maths strategies also come under the overarching fluency in mental calculation umbrella of working towards being maximally efficient, accurate and flexible mental maths practitioners. This is supported by a weekly mental maths homework and mental maths quizzes on Friday's namely using IZAK 9, Kahoot.it, times table work and / or mental maths tests on the school system linked to work completed during the past week. We furthermore use online maths programmes to supplement the pupils learning in school and at home with the programmes comprising of Freckle Maths for P3-P7 and Maths Seeds or Mathletics for P1 and P2.

In addition to this, ICT supports mathematics teaching and enhances the learning of all the children. Wherever possible, we use everyday situations so that the children learn to use mathematics in their everyday life.

We use classroom assistants to support some children and to ensure that work is matched to the needs of individuals.

### **Mathematics and Numeracy Curriculum Planning**

Mathematics is a core subject in the Northern Ireland Primary Curriculum and we use the documentation provided by DENI and CCEA as the basis for implementing the statutory requirements of the programme of study for mathematics and numeracy.

Each year, class, group and individual targets (as appropriate) are set and planned for. These targets are informed by analysis of assessment data carried out in May of each year for P3-7 and the baseline assessment carried out in September in Primary 1. Achievement of targets is monitored and evaluated at the end each term. Class targets for P1 and P2 pupils are also set through teacher judgement and knowledge in relation to areas for development within each class and this translates to all classes in the school, as in St Mary's we regard teacher judgement as an integral ingredient in relation to enhancing, tailoring and maximising pupil learning, progress and attainment. In P1 and P2 baseline assessments in Mathletics or Maths Seeds are also utilised to formulate targets at the beginning and throughout the year. This is true for the P3-P7 classes with the class teachers and Numeracy Coordinator utilising Freckle Maths Reports and STAR Maths tests to help inform practice and pupil learning / focus areas.

During the school year we carry out the mathematics and numeracy planning in monthly planners informed by our yearly schemes based on the Clounagh Numeracy Strategy yearly overviews. The Yearly overviews and learning intentions are then taken and implemented into our monthly planners segmented in a weekly basis and then into daily lessons with resources

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included where possible. The numeracy planners also follow the interleaving and spacing approaches in that they are separated into weekly topics e.g. number week one of a planner, shape and space week two of the planner, measures week 3 of the planner and data handling week 4 of the planner with each topic area covered every term on a well tested and informed rota which has been built over years of trial and adjustment. In addition to this Using Mathematics Planners have also weekly sections for all mental maths work planned daily using the school's adapted Number Fluency programme which follows a cyclical approach through the key areas identified previously with P1 and P2 classes following the Number Fluency resources relevant to their stage and age. The planners have also been composed after discussion within year groups, facilitated by the coordinator, and directed by the Northern Ireland Revised Curriculum guidelines. They ensure an appropriate balance and distribution of work across each year and have a clear progression, continuity and intention from year to year and key stage to key stage. From these we produce:

- From our detailed planning teachers compose daily / weekly evaluations noting what was covered, how lessons went, topics for revision or adjustment and indeed what work may need differentiated further, taught again or taught in a different guise. Teachers are free to choose between typed evaluations or daily organic handwritten notes in real time which can be screen shotted and attached to online evaluations. The evaluations are attached to the numeracy planners and saved as e.g. September Using Mathematics Planner 2025 Evaluations. This ensures continuity and it ensures that prior learning and experience can be utilised in the next planner or indeed in the future as the planners and evaluations are one. Additionally, teacher evaluations identify successful and unsuccessful teaching as well as the degree of success of resources used as well as any alterations made throughout the week or amendments made to planners, lessons, activities or teaching. It also identifies individuals or groups within the class who have not grasped specific topics, and it identifies the action to be taken.
- Teachers own daily plans. Teachers themselves plan what they are going to teach on a daily basis informed by the monthly planners which are as previously noted broken into weekly plans and indeed daily plans. There is of course room for teacher judgement as always in terms of alterations or what should be taught on any given day.
- Planners and evaluations are continually monitored throughout the academic year as they are saved onto the school system with planners updated monthly and evaluations updated weekly. The numeracy coordinator will keep a check on planners and evaluations periodically and at least once per term to try and ensure high standards are continuing to be adhered to.

#### Resources:

- NHM Textbooks 1 – 6
- NHM Workbooks 1 and 2 all available mathematical areas covered

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- Active Maths Foundation Stage, KS1 and KS2
- Rapid Maths Textbooks Stages 1 – 5
- Rapid Maths Photocopy Masters Stages 1 – 5
- Mathematics (Can vary from year to year) P1 – P2
- Maths Seeds (Can vary from year to year) P1 – P2
- Freckle Maths P3 – P7
- IZAK 9 P3 - P7 but predominantly P5 – P7
- Kahoot.it predominantly P5 – P7
- Twinkl
- Scholfield and Sims Folders Introductory folder and folders 1 – 5 P3 – P7
- Scholfield and Sims Mental Maths Books P1 - P7
- Folens Mental Maths Tests P3 - P7
- Education Authority Teams Website Resources
- Education Authority Teams Mental Maths Resources

Note: Resources used are all class / pupil dependent ensuring that each class and each pupil are catered for optimally in all facets. Teachers are also free to use their own teacher judgement, knowledge and expertise to source supplementary resources to support their class / pupils within their class as needed. There may also be slight changes and additions to the maths programmes used in school from year to year.

## **Using Mathematics Across the Curriculum**

### **Communication:**

Numeracy in St Mary's PS Aughnacloy is heavily linked to the subject area of Communication in that the pupils on a daily basis are tasked with reading and deciphering questions as well as solving word based questions / problems of a mathematical nature. The pupils are taught all the relevant mathematical vocabulary and terminology needed across the curriculum with emphasis on attaining understanding and the ability to apply their learning. Class discussion in numeracy also lends itself to literacy in respect to pupils being able to confidently articulate their thoughts and reasoning. Pupils are also encouraged to contribute to class discussions as well as share mathematical strategies employed to complete a maths question. Pupils also engage in asking each other questions which links to literacy and indeed has been proven to enhance learning through peer learning. Pupils also regularly read online maths questions through the school online programmes and they too read non-fiction material in school and through Accelerated Reading where they will encounter statistics, percentages, graphs and charts.

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### **Information and Communication Technology (ICT)**

In relation to ICT children are provided opportunities on a continual basis to utilise their mathematical skills and knowledge to investigate problems, answer questions and extend their learning. Pupils apply mathematical concepts through a range of ICT-based activities to support learning and problem-solving. At early stages, they use technology to present results using appropriate mathematical symbols. As they progress, pupils employ ICT tools such as Microsoft Excel to construct graphs and tables for interpreting and explaining data. They also utilise ICT to create repeating patterns such as tessellations. For mental maths practice, pupils engage with interactive platforms like Kahoot.it, IZAK 9, Freckle Maths and Mathseeds to reinforce quick recall and fluency. In data handling and coding activities, pupils use programmes such as Just2easy Maths and Microsoft Excel again to collect, organise, and analyse information. In control and modelling tasks, pupils work with both standard and non-standard units to measure distance, angle, and they too use simulations to investigate patterns and explore mathematical relationships.

### **The World Around Us (WAU)**

Pupils encounter mathematics throughout WAU in practical and meaningful ways that connect learning to real-life contexts. They develop spatial awareness by using the eight-point compass directions to describe position and movement, plan routes, and interpret maps using scale and distance. Mathematical skills are reinforced through data handling activities such as creating graphs, analysing information, and interpreting results from surveys or investigations. In science, pupils design and conduct experiments, measure variables accurately, and record findings using tables and charts. They apply concepts of time and chronology when calculating durations, sequencing events, and learning about dates in history. Population studies provide opportunities to explore numerical data, compare figures, and identify trends. Outdoor learning further enriches these experiences, allowing pupils to observe patterns, symmetry, shapes, and measurement in the natural world. Through these activities, pupils see mathematics as an integral part of understanding their environment, fostering problem-solving, critical thinking, and real-world application.

### **Personal Development and Mutual Understanding (PDMU)**

Mathematics contributes significantly to pupils' personal, social, and emotional development by promoting independence, collaboration, and resilience. Independent tasks beyond regular lessons encourage pupils to take ownership of their learning, while structured classroom activities foster teamwork, respect for differing viewpoints, and effective communication. Older pupils apply mathematical skills in authentic contexts, such as solving problems involving money or managing budgets within project work, helping them make informed

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decisions. Through the Verbal Well-Being programme, pupils also encounter mathematical ideas in reflective discussions, building confidence in expressing reasoning and interpreting numerical information. These experiences not only support pupils in becoming comfortable and confident mathematical learners but also develop essential life skills such as problem-solving, critical thinking, and financial capability that are linked to future careers in mathematics and STEM-related fields. By embedding these opportunities within PDMU, we aim to nurture resilience and self-belief, ensuring pupils see mathematics as relevant, achievable, and integral to their personal growth and future aspirations.

### **Religious Education (RE)**

Mathematics is woven into our Religious Education programme through the Grow in Love curriculum, where pupils encounter numerical and spatial concepts in meaningful, faith-based contexts. They sequence events from scripture, explore timelines of religious history, and calculate durations linked to liturgical seasons. Pupils also learn about the gifts of the Holy Spirit and engage in Sacramental preparation, which often involves understanding sequences, dates, and planning activities that require organisational and numerical skills. These experiences not only demonstrate the practical relevance of mathematics but also support ethical decision-making, as pupils consider fairness, responsibility, and stewardship when allocating resources or interpreting information. Through these opportunities, pupils develop confidence and indeed their thinking skills, seeing mathematics as a tool for living out their faith and making thoughtful, principled choices in real-world contexts.

### **Assessment**

At St Mary's, assessment is a key tool for monitoring pupil achievement and progression in mathematics and for shaping future learning. Teachers use a range of formative and summative strategies, including observation, questioning, self-assessment, and standardised tests, to identify individual strengths and areas for development. Assessment information is analysed to track progress over time and to ensure that pupils are meeting expected outcomes. This data informs planning, enabling teachers to adapt lessons, provide targeted support, and set appropriate challenges to extend learning. By using assessment effectively, we ensure that every pupil is supported to achieve their full potential and develop confidence as a mathematical learner.

### **Below is a list of assessment strategies and methods in place:**

- ❖ Benchmarking with the NI Data (CCEA);
- ❖ End of key stage assessment results;
- ❖ Standardised test results – GL (Progress Test in Maths)
- ❖ Formative assessment procedures;
- ❖ Formal and informal assessment undertaken as part of normal classroom practice;
- ❖ Observation of practical activities;
- ❖ Discussion with pupils;

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- ❖ Topic tests;
- ❖ Use of Freckle Maths – STAR Tests and associated reports e.g. Growth Reports saved onto the school system.
- ❖ Math Seeds usage, reports and testing data
- ❖ Quality marking of pupil's work based on our Effective Feedback and Marking Policy (tbc – in line to be updated in the coming months)
- ❖ Pupils are made aware of the marking policy; or any marking policy changes
- ❖ Regular, detailed and comprehensive information given to parents about a pupil's achievement and progress.
- ❖ Planner evaluations daily / weekly attached to lesson plans and saved onto the school system.

The above assessment information is analysed with the data informing planning, thus enabling teachers to adapt lessons, provide targeted support, and set appropriate challenges to extend learning. Importantly, assessment outcomes are shared with each teacher during the school year and indeed during dedicated meetings at the beginning of the school year or during the August teacher days, ensuring continuity and a clear understanding of pupil needs. Following these discussions, specific targets are created for individual pupils and for whole classes, guiding teaching and learning priorities for the year ahead. By using assessment effectively, we ensure that every pupil is supported to achieve their full potential and develop confidence as a mathematical learner.

### **Monitoring:**

Monitoring of the standards of children's work and of the quality of teaching in mathematics is addressed each year via:

- Book scoops: pupils exercise books are shared and discussed as a full teaching staff during an annual book scoop meeting. The books are discussed and analysed assessing progression through the year groups / areas for development, thus informing future practice.
- Trusted Colleague Networking: (TCN) takes place at least once per year for each teaching staff member where they will either share their practice or observe practice so as to share best practice amongst all teaching staff.
- Classroom observations; which take place once per year, carried out by the Using Mathematics Coordinator.
- Levelling meeting: Once per academic year the teaching staff meet as a whole school along with the school principal to level pieces of numeracy work based on the levels of progression for the requirements of Using Mathematics.

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- Using Mathematics CCEA levelling task completed once per term. One detailed levelling piece is completed per term for one pupil per year group and saved on the school system. A class spreadsheet is also completed with an overview of class mathematical levels meaning there will be three detailed levelled pieces per year and three whole class levelling entries, therefore every pupil will be levelled through a CCEA task three times per year with three pupil's work (one per term) being selected to undergo detailed levelling.
- Assessment data is used to evaluate development in Maths by determining improvements in children's performance in Maths at whole school, Key Stage, Class and individual levels.
- Governors are kept of informed of the school's progress in Mathematics;

Periodically pupils, parents and staff attitudinal surveys are conducted to assess attitudinal responses to Using Mathematics school work and homework. These surveys take place in conjunction with the school development plan cycles through discussion with the school principal in terms of necessary frequency / timing of the formalised surveys. However, the surveys occur each year informally through ongoing discussion and open dialogue with all parties.

### **Role of the Using Mathematics Coordinator:**

The Numeracy Coordinator is responsible for providing strategic leadership and direction in the teaching and learning of Mathematics across the school. This includes supporting colleagues in the delivery of high-quality mathematics instruction and remaining informed about current developments and best practices within the subject.

At the commencement of each academic year, the Numeracy Coordinator shall prepare an Action Plan that aligns with the School's Strategic Plan. This Action Plan will outline key priorities and objectives for the development of numeracy provision. At the conclusion of the academic year, the Coordinator will conduct a formal evaluation of the Action Plan and report findings to the Principal.

The Principal will allocate appropriate management time to enable the Coordinator to address identified priorities. Where appropriate, this work will be undertaken collaboratively with staff and with the continuing support of the Education Authority (EA), when available. Progress and outcomes will be disseminated across the school through whole-school meetings and through liaising with the staff related to each individual year group as necessary.

Curriculum development in Mathematics is regarded as a continuous process. The school is committed to ongoing improvement to ensure the highest standards of teaching and learning for all pupils.

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## **Equality Statement for Using Mathematics:**

St Mary's is committed to ensuring that the teaching and learning of Mathematics is fair, inclusive, and accessible to all pupils. We recognise the diverse needs, abilities, and backgrounds of our learners and strive to provide equal opportunities for every student to succeed in numeracy.

Our approach promotes:

- **Equity:** All pupils are given the support and resources they need to achieve their full potential in Mathematics.
- **Inclusivity:** Teaching strategies are adapted to accommodate different learning styles, abilities, and cultural backgrounds.
- **Accessibility:** Barriers to learning are identified and removed, ensuring that every pupil can engage meaningfully with mathematical concepts.
- **Respect and Diversity:** We value the contributions of all learners and foster an environment where diversity is celebrated within the Mathematics curriculum.

Through continuous monitoring and evaluation, St Mary's ensures that Mathematics education reflects our commitment to equality and prepares all pupils for lifelong learning.

At St Mary's, we are committed to ensuring that pupils with Special Educational Needs (SEN) receive tailored support in the development of numeracy skills. Personal Learning Plan (PLP) targets are specifically and intentionally formulated to address the individual challenges experienced by pupils with SEN in Mathematics. To ensure effective implementation, planners are produced on a monthly basis and systematically broken down into weekly and daily plans. These plans include activities and resources that are comprehensively differentiated to meet the needs of all learners, including SEN pupils and those identified as gifted and talented. This approach guarantees that every pupil is appropriately supported, challenged, and extended to achieve their full potential in Using Mathematics.

Wherever possible, pupils with SEN are fully included in daily mathematics lessons so they can benefit from the emphasis on oral and mental work and engage in listening, discussion, and collaborative problem-solving with their peers. When necessary, teachers will, in consultation with the SENCO, devise PLPs for pupils requiring additional support. Planning will address individual needs through simplified or modified tasks and, where appropriate, the deployment of support staff. These adaptations are recorded in either the Using Mathematics planners or in the planner evaluation section (weekly) of the monthly Mathematics planner, ensuring that provision is structured, documented, and responsive to pupil needs. The noting of work and adaptations in the evaluation section of the planners also helps to ensure that the necessary adjustments are made to ensure all pupils are catered for entirely and indeed future learning can be guided with increased precision and intention.

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## Using Mathematics Home–School Links

St Mary's is committed to maintaining strong partnerships between home and school to support pupils' progress in Mathematics. Parents will be kept informed of their child's achievement and provided with guidance on how to actively participate in their learning. They will also be updated on relevant developments within the school and the wider educational context. This will be achieved through:

- **Parent–Teacher Interviews:** Formal meetings are held in Term One to discuss pupil progress and review standardised test results. Additional informal meetings may take place at the request of parents or teachers.
- **Annual Summative Report:** A comprehensive report outlining pupil attainment and progress will be issued each year.
- **Parent Workshops:** Informative sessions will be organised to support parents in understanding and promoting mathematical development at home.
- **Effective Feedback:** Work will be marked in a way that provides clear guidance for improvement and celebrates achievement.
- **Homework Activities:** Homework will be carefully selected to reinforce and consolidate classroom learning, with a strong emphasis on mental mathematics.
- **School Events:** Opportunities such as open days, displays of work, and prize-giving ceremonies will showcase pupil achievement and encourage parental engagement.

Date of approval by Board of Governors

Signature of Chair of Governors

Signature of Principal

Date Due for review