



Mathematics and Numeracy Policy

Date Approved by Board of Governors: June 2025

Date to be reviewed by: June 2028

Introduction:

Bangor Central Integrated Primary School is a large primary school of mixed ability, situated in the centre of Bangor Town, immersed in the local community.

In Bangor Central Integrated Primary School, the terms 'Mathematics and Numeracy' are synonymous with each other.

'Numeracy is the ability to apply appropriate Mathematical skills and knowledge in familiar and unfamiliar contexts, and in a range of settings throughout life, including the workplace. It involves the development of an understanding of key Mathematical concepts and their interconnectedness, appropriate reasoning and problem-solving skills, the proficient and appropriate use of methods and procedures (formal and informal, mental, and written) and active participation in the exploration of Mathematical ideas and models'. (Count, Read, Succeed DENI 2011)

The term Numeracy brings with it, connotations of real-life applications and the use of Mathematics as a natural tool across the curriculum. Mathematics teaches us how to make sense of the world around us through developing every child's ability to calculate, to reason and to solve problems. It enables children to understand and appreciate relationships and patterns in their everyday lives. Therefore, Mathematics and Numeracy are key areas of the curriculum within school, and life skills that are utilised throughout every person's day to day experience.

Policy Aims:

- To promote high standards and consistency of approach amongst all staff.
- To ensure a broad and balanced curriculum in Mathematics is taught throughout the school.

Child Centred Provision:

Through the effective planning and teaching of Mathematics and Numeracy, we aim to:

- Ensure that every pupil fulfils their potential in Mathematics and Numeracy.
- Foster a positive attitude to Mathematics, promoting confidence and enjoyment for learning.
- Develop logical thinking and reasoning skills through a natural curiosity and investigative approach.
- Expose children to a variety of learning experiences, including independent exploration, practical work, play based learning, recorded work, ICT, outdoor learning, and investigative activities.
- Develop a thorough knowledge of numbers and the number system.

- Develop the ability to solve problems through decision making and reasoning in a range of different styles.
- Develop a practical understanding of the ways in which information is gathered and presented.
- Explore the features of shape and space and develop measuring skills in a range of contexts.
- Develop the ability to apply knowledge, skills, and ideas in real life contexts outside the classroom and become aware of the uses of Mathematics in the wider world.

High Quality Teaching and Learning:

The following indicators from ESaGS are reflected in our school's approaches:

- *A broad and relevant curriculum is provided for the pupils.*
- *An emphasis Mathematics and Numeracy exists across the curriculum.*
- *Teachers are committed and enthusiastic, enjoying a positive relationship with their pupils and with other school-based staff and dedicated to improving learning.*
- *Teachers use adaptable, flexible teaching strategies that respond to the diversity within the classroom.*
- *Assessment and other data are used to effectively inform teaching and learning across the school and in the classroom and to promote improvement.*
- *Rigorous self-evaluation is carried out by teachers and the whole school, using objective data and leading to sustained self-improvement.*
- *Teachers reflect on their own work and the outcomes of individual pupils.*
- ***Education outcomes reflect positively on the school and compare well, when benchmarked measurement is undertaken, against the performance of similar schools.***

The content of the Mathematics and Numeracy curriculum taught in Bangor Central Integrated Primary School is guided by our statutory requirement to deliver the curriculum for Mathematics as led out in the Northern Ireland Curriculum (CCEA 2007). It sets out the minimum requirements that must be taught at each key stage, grouped in to 5 areas and they are Requirements, Number, Measures, Shape and Space and Handling Data.

Approaches to Teaching and Learning:

- Teachers create 6 weekly planners which incorporate learning intentions, teaching strategies/activities, assessment details and resources. These planners then inform teachers' weekly planners and daily notes.
- Numeracy coordinators regularly monitor 6 weekly notes, view pupil's work and carry out PRSD observations when relevant.
- Foundation Stage teachers plan a range of play based activities, both inside and outside the classroom through which the children develop early Mathematical language, concepts and understanding appropriate to their age and ability.
- All teachers use an appropriate range of learning and teaching strategies to motivate the pupils and engage them purposefully in working both collaboratively and independently.
- Through evaluation, teachers then set expectations to challenge and motivate the pupils.
- Thinking Skills and Personal Capabilities are infused within Numeracy and Mathematics lessons.
- The use of Mental Maths Strategies is integral in the teaching of Mathematics throughout the school.
- ICT continues to be used appropriately and effectively to enhance the teaching of Mathematics e.g. iPads, Apple TV, Beebot, Numicon, Izak9, Just 2 Easy, Times Tables Rockstar, Primary Games etc.

Assessment:

Our current assessments for Mathematics include diagnostic, formative and summative procedures.

- Teachers use an appropriate range of learning strategies including self and peer assessment, and formative use of key assessment outcomes.
- Foundation Stage staff make regular observations during Numeracy lessons and use these for future planning.
- Written work is marked, highlighting strengths, and providing feedback on what the pupil needs to do in order to improve.
- Continuous assessment of pupils is ongoing, ranging from teacher observations and discussions to the interpretation of standardised results. Planned assessment check-ups will be carried out.
- Standardised tests such as PTM and CAT are completed online, with results being analysed by the Assessment Team, SEN team and Numeracy Coordinators, then further by staff. Interpretation of data and teacher judgement should be used effectively to highlight pupils who are deemed to show low attainment or underachievement. These findings are used to inform future Numeracy Planning and to assist the SEN team.

Effective Leadership:

The following indicators from ESaGS are reflected in our school's approaches.

- *An effective school development plan is in place.*
- *Teachers are given the opportunity to share in the leadership of the school.*
- *School leaders monitor and evaluate effectively school outcomes, policies, practices and procedures and the School Development Plan itself.*

- The coordinators will ensure the overall development of this area within the School Development Plan, with the support of the Senior Leadership Team and the Principal.
- Where appropriate, the coordinators should identify and make provision for the training needs of staff, with Board support if available, within school or working with other schools.
- Links are made with the Numeracy coordinator, SENCO and other coordinators when necessary to ensure Numeracy is integrated and developed across the curriculum.
- The SENCO will assist Y4-7 teachers in the identification of pupils relating to low attainment, under achievement and stanine band performance in Numeracy, using GL assessment data. This is for in class teacher support in low attainment, underachievement. Progress is reviewed by teachers in January, evaluated in May and monitored by the Assessment Co-ordinator and SENCO.
- Pupils receive differentiated teaching appropriate to their learning needs. When a child has been identified as having a significant learning need, the Code of Practice will be followed, and Individual Education Plans will be provided where needed. If necessary, the advice of outside agencies will be sought.
- To assist with the continuity and progression, teachers will gain knowledge of what happens at all stages in school through regular staff, Key Stage and core committee meetings. These meetings will allow teachers to share in the planning and development of Mathematics and Numeracy throughout the school.

Monitoring and Evaluation:

Action Plan:

- Coordinators compile a 3-year overview for Mathematics and Numeracy.
- Coordinators compile a Mathematics and Numeracy Action Plan annually each September. This is evaluated by the Monitoring and Evaluating Coordinator and used to inform the School Development Plan.
- A Mid-Year Review is carried out and allows Coordinators to assess how key targets are progressing.
- The evaluation of the Action Plan is carried out in June, with feedback provided to the Senior Leadership Team.

Teaching and Learning:

The evaluation of Teaching and Learning includes

- Monitoring teachers' 6 weekly plans.
- Viewing pupil performance in books, samples of work and work on display.
- Core committees.
- Discussions with pupils.
- PRSD visits.
- End of Key Stage results.
- Standardised test results.
- Parental interviews.

A School Connected to the Local Community:

The following indicators from ESaGS are reflected in our school's approaches

- *Good relationships that facilitate engagement and communication between the school and its parents and the wider community that it serves.*
- *The school and its teachers are held in respect by parents and the local community who in turn actively support the work of the school.*
- *Good relationships and clear channels of communication are in place between the school and the education agencies that support it.*
- *The school works closely with other relevant statutory and voluntary agencies whose work impacts on education.*

Links with Parents:

We aim to promote parental involvement and place a focus on developing good partnerships between home and school in order to promote excellent Mathematics and Numeracy standards. Approaches will include:

- Curriculum evenings towards the beginning of the academic year for each Year group. (Information leaflets if face to face is not possible)
- Biannual parent/teacher interviews.
- Numeracy homework set on a weekly basis.
- Mathematics and Numeracy information book for Years 4-7
- Weekly number/table facts activities for Years 3-7.
- Parent workshops

Links with Schools:

- SENCO and Head of Foundation Stage staff meet with local nursery schools in June to help new pupils transition.
- PTM scores are shared with post primary schools to help aid transition from Year 7 to Year 8.
- Numeracy coordinators are members of the North Down Numeracy Cluster Group.
- Good links with local post primary schools through Shared Education.

Links with the Community:

- Local agencies and businesses help supplement the Mathematics and Numeracy curriculum (e.g. ASDA and Young Enterprise).