

HARMONY PRIMARY SCHOOL



Mathematics and Numeracy Policy 2024

Our VISION

Our Vision is to nurture and develop aspirational, life-long learners, using core values and continually growing and embedding strong community links.

INTRODUCTION

In Harmony Primary School we value every pupil and the contribution they make to learning. As a result, we aim to ensure that every child achieves success and that they are enabled to develop their skills in accordance with their level of ability. Numeracy 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 pattern in their everyday lives. Mathematics is a key skill within school and is a life skill to be utilised throughout every person's day to day experiences. In essence Numeracy and Mathematics are one and the same.

Maths vision: It is our vision that Numeracy and Mathematics in Harmony Primary equips all pupils with the skills and enthusiasm to become lifelong learners; whilst striving to challenge each child to reach their full potential.

AIMS

The aims of this policy are to:

- address the whole school audience.
- set out principles which aim to ensure the quality of teaching and learning.
- ensure the staff is aware of the teaching approaches associated with Mathematics and Numeracy
- identify the roles, which each member of staff has in the promotion of Mathematics and Numeracy.

GENERAL KEY PRINCIPLES FOR NUMERACY

- the development of Mathematics should be an integral part of the School Development Planning process.
- teachers should plan to ensure a broad and balanced curriculum for Mathematics.
- teachers will use an appropriate range of teaching strategies.
- there will be appropriate use of ICT.
- Mathematical skills will be incorporated across the curriculum.
- teachers will have the opportunities for professional development as necessary.
- positive attitudes to Mathematics will be fostered.
- teaching and learning will take account of the key role of language within Mathematics.
- pupils will be encouraged to become increasingly independent and to exercise choices and make decisions in their learning.
- Processes in Mathematics will be incorporated across the Attainment Targets.
- support for Mathematics learning will extend beyond the school context, in particular to include the role of parents and governors.
- there will be arrangements to ensure that all pupils make appropriate progress in Mathematics.
- assessment will be an integral part of the teaching and learning process and will be used to inform future planning.

- the importance and relevance of Mathematics in everyday life will be promoted.

TEACHING AND LEARNING

Teaching will focus on the development of skills, knowledge and concepts required to maximise learning by using a variety of teaching and learning strategies in Mathematics lessons. Through practical work and written activities pupils develop the curricular areas of Number, Shape and Space, Measure, and Handling Data, through exploring and manipulating their immediate environment. They acquire and develop mental maths strategies and progress towards being able to problem solve and communicate their ideas mathematically and with confidence.

Teachers make the teaching of mathematical processes and concepts as interesting and as relevant as possible, placing emphasis on interactive and collaborative activities. Pupils engage in:

- The Development of Mental Strategies
- Written Methods
- Practical Work
- Investigational/Problem Solving Work
- Mathematical Discussion and Development of Mathematical Language
- Consolidation of Basic Number Skills and Number Facts.

During lessons clear learning intentions will be discussed at the beginning of each lesson and the active involvement of pupils in their own learning will be sought through the use of effective questioning, Assessment for Learning strategies and pupil reflection. We encourage children to ask as well as answer mathematical questions. They have the opportunity to use a wide range of resources and small apparatus to support their work. Children use ICT in lessons to enhance or consolidate their learning. Teachers will implement daily mental strategies to develop recall of number facts, understanding of the number system, approximating, and calculating. Wherever possible, we encourage the children to use and apply their learning in everyday situations. Manipulations and representations are used throughout the classes within school to help pupils engage with mathematical ideas. Planning, progression, differentiation, resources and the grouping of children will reflect best practice in learning. Teachers will make full use of the school and surrounding environment to maximise learning.

PLANNING

Curriculum planning is carried out in three phases (long-term, medium term and short-term). The Lines of Progression Framework and those included in the Whiterose Maths (P1-P3) and Collins programmes for Mathematics (P4-7) give a detailed outline of what we teach from Primary One to Primary Seven. The medium-term plans identify the key requirements and teaching objectives in mathematics that we teach every half term. They ensure an appropriate balance and distribution of work across each term.

Evaluations of medium-term Numeracy plans are compiled within each year-group and reviewed by the Subject Co-Ordinators and the School Principal. These evaluations are used to inform future planning.

CONTINUITY AND PROGRESSION

In our planning we intend to ensure that pupils have experiences across each of the five aspects of Numeracy and through the different levels. Progression is ensured by using the Lines of Development with the content taken from the Northern Ireland Curriculum. Learning intentions will be set and met through the delivery of differentiated lessons.

CULTURE OF IMPROVEMENT

A school culture of achievement, improvement, and ambition exists with clear expectations that all pupils can and will achieve to the best of their ability. Learning Intentions and Success Criteria are shared in our classrooms through age-appropriate means (such as the use of WALT and WILF, etc.) so that pupils understand what they are learning and how they can succeed in their work. Work is differentiated so that pupils can feel confident completing tasks whilst also being suitably challenged within their learning where necessary. Thorough marking of work allows pupils to be praised for success and individual feedback to be given when necessary. The use of Assessment for Learning means individual targets can be set to help pupils strive for personal goals. Motivational rewards are also used to encourage children to reach their full potential.

ASSESSMENT

Assessment is regarded as an integral part of teaching and learning, and it is a continuous process. It is the responsibility of the class teacher to assess all pupils in their class on an ongoing basis. Teachers use formative, summative, and diagnostic assessment methods. In Harmony Primary School, we are continually assessing our pupils, and recording progress, thus allowing us to match the correct level of work to the needs of the children.

Information for assessment is gathered in the following ways:

- Pupil Observations
- Communication with Pupils
- Marking Work
- Weekly 'Check Up'
- Doodle Maths Data (P1-P3)
- PTE/PTM/CAT

We use data compiled from GL Assessment packages from PTM, PTE and CAT diagnostic tests to inform our future planning. Assessment in Foundation Stage involves regular observations and written records being made on each child by the teacher and classroom assistant. The adults are looking for how the child's knowledge, understanding, and skills are developing through practical and written mathematical activities. On a daily, weekly, and six-weekly basis these observations are reviewed, and action is taken to ensure future planning supports the learning for each child. Throughout the year informal testing is carried out both practically and in written form to monitor progress further.

SPECIAL EDUCATIONAL NEEDS

In Harmony Primary School, teachers are aware that pupils have different experiences, interests, and strengths, which will influence the way in which they learn. We believe that all children can learn mathematics and endeavour to use a wide range of teaching strategies to suit individual needs as they arise. We use a range of strategies to help children with difficulties in maths lessons.

Once teachers have identified pupils with specific difficulties within Numeracy that require special help, they must employ reasonable adjustments within their own classroom setting. Then, working alongside the SEND Co-Ordinator, teachers should establish targets for individual children. The SEND Policy applies to all areas of Mathematics and the individual learning needs of each child must be reflected within the Individual Education Plans (IEPs) or Action Plans (Stage 1).

Harmony Primary School places a strong emphasis on ‘pupil voice’ where they are involved in the discussions surrounding their teaching and learning and can provide input to their future targets and attainment goals.

We are committed to meeting the needs of gifted and talented children through specific differentiation and extension groups in the classroom setting.

Teachers must utilise Classroom Assistants or extra adults in their classrooms to provide support and help where appropriate to these pupils.

Early and effective interventions and support are in place to meet the additional needs of pupils and to help them overcome barriers to learning. In Harmony Primary School, we recognise the need to cater for children with Special Educational Need. These needs are reflected within IEPs/PLPs set by the child’s teacher and discussed with the SEND Co-Ordinator and the child’s parents. Tasks are approached in such a way that all children have achievable goals. Work is differentiated to assist all children in terms of:

- Expected Learning Outcomes
- Tasks
- Teaching Methods
- Resources.

Pupils with Special Educational Needs may be identified by:

- Class Teacher Observations;
- Standardised Test Scores/Data Analysis;
- Difficulties with General Classwork;
- Reports from Transferring Schools.

Under-achievers and low achievers receive one-to-one or small group interventions appropriate to their needs. Classwork and Homework are differentiated to meet the individual needs of these children.

ICT

ICT should be seen as an integral part of Mathematics and Numeracy and should be used to help enhance our pupils’ learning as per the ICT Policy.

ROLE OF MATHEMATICS AND NUMERACY CO-ORDINATOR

The Numeracy Co-Ordinator with all teaching staff, are responsible for improving the standards of teaching and learning in Mathematics and Numeracy. The Co-ordinator will be responsible for evaluating the effectiveness and fitness for purpose of the learning process within the school’s provision. The Co-ordinator is responsible for the learning process through INSET for all members of staff and in securing the required resources to support learning. The Co-ordinator will also seek advice and training to assist target setting and thereby enhanced learning. In term three the Co-ordinator reports to the Board of Governors in response to the Numeracy and Mathematics Action Plan.

HOMEWORK

Homework is used to support the learning process through the school’s homework policy and to reinforce work completed in school or to allow children to further investigate a topic or concept.

RESOURCES

There is a wide range of resources to support the teaching of Mathematics across the school. The school does not solely rely upon the Whiterose Maths (P1-3) and Collins Mathematics scheme (P4-P7) as it is felt that relying upon one scheme limits our children's mathematical experiences. Teacher generated worksheets, practical and concrete resources, games and ICT software further supplement a wide range of learning resources. Each key stage has the necessary equipment for their own class which is stored in their classroom. The Co-ordinator is responsible for maintaining and monitoring the resources stored centrally for Foundation, Key Stage One and Two, which are used regularly and shared among the classes. We use manipulatives and representations in all classes and encourage children to use concrete resources when necessary, despite their age. We understand that manipulatives should be temporary and act as scaffold and therefore will be removed once independence has been achieved.

STAFF DEVELOPMENT

Teachers are encouraged to develop and disseminate good practice in the teaching and learning of Numeracy through:

- PRSD
- Observations
- Whole School and Key Stage Staff Meetings where 'in-school' training is provided
- Local Schools within 'Cluster Groups'
- Through annual appraisals with the Principal and the PRSD process, teachers are given the opportunity to discuss their own personal development and receive feedback where good practice is identified and encouraged.

MONITORING AND EVALUATING

Monitoring and evaluating are fundamental parts of the teaching and learning in our school and are the responsibility of all the teachers. The Numeracy Co-Ordinator and SLT oversee the progress made towards meeting the targets set out in their Action Plans. Progress is monitored through:

- The Co-Ordinator carrying out 'book scoops'
- Displays of work
- Informal discussions with staff
- Formal discussions with staff through Literacy and Numeracy Curricular Teams
- Discussions with pupils
- Staff Meetings with a Numeracy focus
- Review of teachers' planning by Co-Ordinators and SLT
- Examining Standardised Assessment Data (PTE/PTM)
- End of Key Stage Assessments and Benchmarking Data
- Reviewing Whole-School Progression, ensuring that continuity, development, progression, and differentiation are evident.
- Parents' Questionnaires

The Numeracy Action Plan is evaluated at the end of each academic year and used to establish future areas for school development.

We acknowledge and appreciate the support of the Board of Governors in all aspects of school life. They are kept up to date with standards of achievement in Numeracy through annual meetings with Co-Ordinators.

PARENTAL INVOLVEMENT

We view parents/guardians as one of our greatest natural resources and should be involved with their children's progress as much as possible. Parents should be made to feel welcome to discuss their child's progress and how to participate in their education. It is school policy to give a written report in term three and parents are invited into school in term one and two to meet teachers to discuss progress. Staff are available for consultation regarding individual difficulties or problems hampering the progress of their child in Mathematics. Parents are encouraged to oversee and ensure the completion of Numeracy homework's set on a weekly basis. Parent Questionnaires are used to provide feedback to staff on various curricular areas which inform the School Development Plan.

Mathematics and Numeracy Team – Led by S. Marshall
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