

Lisnadill Primary School



Mathematics and Numeracy Policy

Principles

Mathematics provides a means of communication which is powerful, concise and unambiguous. Its capacity to explain, describe and predict gives Maths the power and pervasiveness that accounts for its importance in the whole school curriculum.

Rationale

We the staff of Lisnadill Primary School teach Mathematics because it is an essential tool for life. We want to display a positive attitude towards it. We want our pupils to succeed not only at mathematics in our school but throughout their education and indeed succeed throughout their entire lives.

Our Aims are:

- To encourage the effective use of mathematics.
- To develop the ability to think clearly and logically.
- To develop personal qualities of perseverance, confidence, independence and co-operation with others.
- To enable all pupils to experience success and pleasure through practical activities.
- To enable pupils to communicate effectively through the medium of mathematics.
- To foster an understanding of mathematics through a process of enquiry and experiment.
- To encourage mastery of basic mathematical skills and knowledge.
- To encourage the use of ICT to support the teaching of mathematics.
- To encourage parents to become involved in their children's learning.

Resources

Personnel

The coordinator will be responsible for developing Mathematics in school. Each teacher also recognizes their responsibility in developing Mathematics and working closely with year group colleagues and classroom assistants who also have an important role.

Other personnel who support this group include parents, EA Southern Region and CCEA liaison officers and teachers from relevant secondary schools.

Equipment

The coordinator and classroom teachers will be responsible for ordering, monitoring and maintaining the mathematical equipment. Equipment will be stored in classrooms while some equipment will be shared within a year group.

Printed Matter

Collins Textbooks
Ginn Textbooks
Heinmann Textbooks
Scottish Primary Maths Textbooks
Master Maths Textbooks
Heinmann Groups Work books
Peter Patilla Mental Maths Teacher Books
Ready, Set, Go Maths by Eunice Pitt

ICT.Resources

ICT is important in supporting the teaching and learning of mathematics. Each class has 3/4 computers and an interactive whiteboard. Software includes C2K Programs, Maths Whizz and Espresso.

School Environment

The extensive school grounds are used for a variety of practical activities including measurement, shape and space, Maths Trails as well as activities and games involving playground markings. The broader environment also provides us with a range of amenities including the Palace Stables.

Summary of Content

In Lisnadill Primary School we will provide opportunities and experiences for pupils to develop knowledge, understanding and skills in the areas outlined as Statutory Requirements for Mathematics in the Northern Ireland Curriculum.

They are:

Foundation Stage

Number
Measures
Shape and Space
Sorting
Patterns and Relationships

Key Stage 1 and 2

Processes in Mathematics
Number
Measures
Shape and Space
Handling Data

Processes in Mathematics will pervade the entire programmes involving children in using and applying mathematics in practical tasks, real-life problems and within mathematics itself.

The Role of the Teacher

- To promote positive attitudes and experiences in numeracy which pupils find enjoyable, rewarding and challenging.
- To plan, organise and deliver lessons and to evaluate his/her own effectiveness and pupil responses.
- To monitor and evaluate pupil progress and attainment.
- To share a common understanding and approach to achieve consistency throughout the school.
- To use ICT in promoting numeracy
- To use numeracy in other areas of the curriculum.
- To give guidance to other supporting adults.

Classroom Management

We aim to give our pupils a variety of learning experiences in Mathematics lessons. These will include:

Discussion	Pencil and paper	Mental Maths
Calculator work	Games and puzzles	Multimedia
Use of ICT	Use of the environment	Problems
Investigations	Practical activities	Estimation
Songs and Rhymes		

Mental Maths will take place in a daily session at the beginning of each maths lesson. It will involve the teaching and application of mental maths strategies, mental calculation and recall of facts. These sessions will be enjoyable, interactive and use some of the experiences described above.

The teaching strategies used will include practical teacher demonstration, individual, paired, group and class teaching. These strategies will match:

- The level of understanding of the pupil;
- The age and ability of the pupil;
- The nature of the topic;
- The available resources.

Mathematics/Numeracy across the curriculum

Mathematics contributes to many other subjects of the curriculum. Other subjects can provide the opportunity to develop and enhance mathematical thinking skills and knowledge. Mathematics also makes a significant contribution to the development of Thinking Skills and Personal Capabilities. Pupils will be involved in activities which promote the skills of managing information, problem solving and being creative, whilst developing their abilities of working with others and self management.

Opportunities for developing Mathematics across other subjects are being exploited and will be incorporated into the schemes of work.

ICT is an integral part of the planning and delivery of the Mathematics curriculum. Through well-structured planning ICT can be incorporated into numeracy lessons where appropriate. Appropriate use of software may enhance the teaching and learning of Mathematics. Computer hardware

e.g. videos, electronic communication, multimedia and calculators are also available for use during lessons.

Continuity and Progression

In our planning we intend to ensure that pupils have experiences across each of the five mathematical areas and through the different levels. Progression is ensured by using the Inter-Board Lines of Development with the content taken from the Northern Ireland Curriculum – Learning area of Mathematics and Numeracy.

Continuity is ensured by whole staff agreement on:

- Mathematical language and conventions remembering that each concept has its own language, concept and procedure
- Compatibility of teaching approaches
- Development of schemes of work which include progression in ICT
- Appropriate teaching strategies
- Classroom organisation
- Resources and materials
- Assessment and recording procedures

Teachers will plan within year groups, and also liaise vertically to ensure continuity. Where possible, links should be developed with the secondary sector.

Differentiation and Equal Opportunities

Staff will provide a differentiated learning environment, which takes account of:

- Gender
- Cultural diversity
- High and low achievers
- Children with Special Educational Needs

In line with the Code of Practice, the special needs of individual pupils will be catered for through consultation with parents, pupil, SENCO, Mathematics coordinator and other appropriate agencies (See Special Needs Policy). To ensure early intervention when required, we will monitor the progress of all pupils on a daily basis.

Monitoring and Evaluating

Monitoring and Evaluating are integral parts of the teaching and learning in our school and are the responsibility of all members of staff. The SMT and coordinator will oversee the progress we are making towards fulfilling our aims. This will be achieved through:

- Teacher and pupil evaluations
- Displays of work in an area of Mathematics
- Informal discussions with staff
- Discussions with pupils
- Formal mathematic meetings
- Regular reviews of the Numeracy Action Plan
- Book Scoops
- Review of teachers' planning

We will ensure that the pupils' work is of a high standard and that these standards are evaluated, maintained and improved. We intend to do this through:

- The sharing of learning intentions and success criteria
- Formative assessment
- Class/topic/end of year tests
- End of Key Stage Assessment results
- Levels of Progression
- Formal and informal assessment undertaken as part of normal classroom teaching
- Observation of practical activities
- Plenary Sessions
- Discussion with pupils including pupils' self assessment.
- Standardized test results i.e. PTIM, NINA
- Quizzes and puzzles
- Quality marking of pupils' work including discussion on areas for improvement. Time will be allocated for pupils to reflect and to respond to teachers' comments.
- Regular, detailed and comprehensive information given to parents about a pupil's achievement and progress.

Home/School Links

Parents will be kept informed of the progress of their children and how to participate in their education. They will also be made aware of issues of interest to them concerning developments within the school or the wider education field. This will be done through:

- Bi-annual Indicator Reports
- End of year reports
- Parent Consultations
- Open Night
- Parent Meetings
- Informative and helpful remarks when marking work
- Well chosen homework activities
- Displays of Work
- Prize Giving

Secondary School Links

Lisnadill Primary School will endeavour to maintain and develop links with local Secondary Schools (Armagh Royal Grammar School, Marhethill HS, Newtownhamilton HS , City of Armagh HS) and This will involve sharing resources, attending events and meeting formally and informally when possible. We are currently partnered with Newtownhamilton High School in the Cross Phase development programme.

Policy Review

This policy will be kept under constant review and amended, after consultation, and when appropriate.