

HOLY FAMILY PRIMARY SCHOOL
MAGHERAFELT



**NUMERACY
POLICY STATEMENT**



Updated Sept. 2010

NUMERACY

STATEMENT OF POLICY

We, the staff at Holy Family Primary School, teach Mathematics because it is an essential tool for life. We believe that Mathematics has a vital importance to enable lifelong learning and for operating effectively in society. It is understood by all staff that Mathematics and Numeracy are one and the same, as defined in the DENI School Improvement Programme and the NEELB'S Numeracy Policy.

Our Aims are:

- to encourage the effective use of mathematics
- to develop the ability to think clearly confidently and logically
- to develop in the pupils 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 develop financial capability
- 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

While as a staff we recognise the responsibility which each of us has in developing Mathematics, our Co-ordinator will be responsible for the development of Mathematics in our school.

Equipment

Money is made available to class teachers, who are responsible for ordering Maths resources for their classroom.

The Co-ordinator is responsible for maintaining and monitoring shared resources.

Within Foundation Stage and Key Stage One, resources are not kept centrally; instead each teacher has built up an amount of concept building materials for use in her own classroom. In Key Stage Two there is a central maths resource cupboard, which holds sets of games and some large equipment.

In all Key Stages, teachers endeavour each year to augment their supply of Mathematics resources and materials. A requisition list of essential and desirable concept building materials has been provided to each key stage.

Printed Matter

The school is currently using guidance materials/ideas from the Numeracy Strategy training throughout the school. Other commercially produced textbooks will be used to supplement this, refer Appendix 1.

Throughout upper Key Stage 1 and Key Stage 2 current timetables, catalogues, brochures, plans, price lists, menus, rotas etc. will be used to promote the real life aspect of Mathematics.

I.C.T. Resources

As already stated, I.C.T. is important in supporting the teaching and learning of Mathematics. Each class presently has at least one computer and a timetabled session in the I.C.T. suite. All rooms are equipped with Interactive White Boards. Mathematics software (primarily C2K programs and Primary Games) are listed in an age/ability basis and are on display in the I.C.T. suite. Teachers also hold a copy of this information.

Details of school broadcasts which support teaching and learning are listed in Appendix 2.

CLASSROOM MANAGEMENT

We will ensure our pupils have a variety of Learning Experiences in Mathematics lessons.

These will include:

- Asking and answering questions
- Use of mathematical language
- Practical activities (doing and observing)
- Play
- Exploring and investigating (choosing appropriate materials/equipment)
- Open-ended problems
- Estimation
- Prediction
- Mental Maths work
- Reading, drafting and recording
- Calculator work
- Use of I.C.T.
- Games, puzzles, songs, rhymes and stories
- Use of the environment
- Broadcasts

The Teaching Strategies used will include practical teacher demonstration, individual, paired, group and class teaching. Clear learning intentions will be discussed at the beginning of activities, success criteria agreed upon 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. **Teaching will actively promote Sharma's Levels of Knowing – Intuitive, Concrete, Pictorial, Abstract, Application and Communication.** These teaching strategies will match: the level of understanding of the pupil, the age and ability of the pupil, the nature of the topic and the available resources.

Teachers endeavour to balance mental computation and pencil and paper methods with practical investigation and co-operative work. Teachers have planned for and will implement daily mental strategies to develop quick recall of number facts, understanding of the number system, approximating and calculating.

Planning shows a range of teaching approaches designed to cater for different learning styles.

CONTINUITY AND PROGRESSION

Our planning allows pupils to 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 Northern Ireland Curriculum; Primary documentation.

Continuity is ensured by the whole staff agreement on:

- development of Numeracy planners
- use of NEELB Number scheme of work
- mathematical language and conventions
- appropriate teaching strategies
- classroom organisation
- resources and materials
- assessment and recording/marking procedures.

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 co-ordinator will oversee the progress we are making towards fulfilling our aims. This will be achieved through:

- Regular reviews of the Numeracy Action Plan
- Review by the co-ordinator of teachers' planning
- Sharing of good practice
- Evaluation of pieces of work (internal standardisation)
- Examining standardised test results
- Displays of work
- Formal Numeracy meetings

The evidence, which we gather through these monitoring procedures, will be evaluated regularly in order to inform future planning.

We view assessment as an integral part of the teaching process. We will try to ensure that the pupils' work is of a high standard and that these standards are evaluated, maintained and, in identified areas, improved upon. We intend to do this through:

- Standardised test results
- Formative assessment procedures (InCAS)
- Internal standardisation procedures
- Observation of practical activities
- Discussion with pupils
- Quality marking of pupils work
- Regular, detailed and comprehensive information given to parents about pupil's achievement and progress

USING MATHEMATICS ACROSS THE CURRICULUM

Mathematics contributes to many other subjects of the curriculum. In return, other subjects can provide the opportunity to develop and enhance mathematical skills and knowledge. Mathematics also makes a significant contribution to the development of the whole curriculum skills of communication and using I.C.T. Opportunities for developing Mathematics across other subjects are being exploited and have been incorporated into the Numeracy planners and Number scheme of work. It appears within the 'General Learning Intentions' information on World Around Us planners also.

ICT is an integral part of the planning and delivery of the Mathematics curriculum. Details of the part it plays in supporting the teaching and learning are included in the Numeracy planners and the Number scheme of work.

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 educational field. This will be done through:

- Informative and helpful remarks when marking work
- Well chosen homework activities (see Homework Policy)
- Parent/teacher interviews
- InCAS results meetings
- Written Pupil Profile in June
- Corridor displays
- Encouraging parents to meet with teachers to discuss difficulties or problems hampering the progress of their child in Mathematics
- Informing parents of the school's attainment in Numeracy

DIFFERENTIATION AND EQUAL OPPORTUNITIES

In line with the Code of Practice, the special needs of individual pupils will be catered for by the class teacher. Effort is made to ensure that Mathematics work is carefully differentiated, enjoyable and challenging to meet the needs of all, including those children from diverse linguistic and cultural backgrounds. Teachers take into account the information they receive from previous teachers, as well as their own observations and assessments, when deciding on the most appropriate tasks for each pupil. They are committed to providing equal opportunities for boys and girls and pupils with disabilities and they endeavour to build confidence, ensure enjoyment and offer praise and encouragement for all pupils.

THE WAY FORWARD

In the academic year 2010/2011, we have taken Measures as an overall area for development throughout the school, chosen when we examined school attainment in relation to expectation within assessment procedures.

Individual year groups will also take direction from the outcomes of the review of standardised assessments. They will identify particular aspects of Numeracy to be addressed in their action plans that require further development within that year group as outlined in the reviews.

Year groups will also be required to use the tracking information to pinpoint children for focus during the academic year, modifying work/ teaching strategies, raising expectation or providing extension activities in order for them to achieve full potential.

APPENDIX 1 – Numeracy Schemes

- Year 1: Maths Quest Stimulus Pictures
Ready, Steady, Maths
NEELB Number Scheme
- Year 2: Heinemann
Maths Chest
100 Maths Homework Activities
NEELB Number Scheme
- Year 3: Heinemann
NEELB Number Scheme
- Year 4: Heinemann
Cambridge Maths
NEELB Number Scheme
- Year 5: Heinemann
Mental Arithmetic Introductory/Book 1
NEELB Number Scheme
- Year 6: Heinemann
Oxford Mastermaths Book 2/3
Oxford New Mastermaths 2
Mental Arithmetic Books 1/2/3
NEELB Number Scheme
- Year 7: Heinemann
Oxford Mastermaths Books 3/4
Mental Arithmetic 2/3/4
Folens Tests Books 4/5/6
NEELB Number Scheme

APPENDIX 2 - School Broadcasts used in the teaching of Numeracy

Year 1: Number time

Year 2: Number Crew