



Culmore Primary School

Numeracy Policy

Date Approved by Board of Governors	Review Date
	Sept 2020

Principal's Signature

Signature of Chairperson (Board of Governors).....

Date:

At Culmore Primary School Mathematics/Numeracy is regarded as an essential life skill for all pupils and is the responsibility of all teachers in partnership with the learning assistants, pupils, parents, Board of Governors, WELB and other support agencies.

Numeracy is the development and application of mathematical skills across the curriculum and in real life situations.

Throughout Culmore Primary School, children engage in a wide range of purposeful activities which involve them in different modes of mathematical learning, including playing, exploring and investigating, doing and observing, talking and listening, asking questions, reflecting, drafting, reading and recording.

Effective mathematics/numeracy development should promote a positive attitude to mathematical learning through experiences which are creative, enriching, enjoyable and challenging.

PURPOSES

At Culmore Primary School the purposes of the teaching and learning of mathematics/numeracy are:

- to develop mathematics/numeracy within the wider framework of the School Improvement Programme
- to promote leadership and management of mathematics/numeracy at all levels in the school
- to raise mathematics/numeracy standards by enhancing the quality of learning and teaching
- to incorporate the appropriate use of ICT in the teaching of mathematics/numeracy
- to provide staff development which will ensure a shared understanding, common approach and consistency across the school.

TO PROMOTE IN PUPILS

- A positive approach to mathematics/numeracy as an interesting, enjoyable subject in which all can experience success.
- An ability to think clearly and logically in mathematics/numeracy with confidence, independence of thought and flexibility of mind.
- A feel for number and an understanding of mathematics/numeracy through the process of enquiry and experiment.
- An appreciation of mathematical pattern and the ability to identify relationships.
- Mathematical skills and knowledge accompanied by the quick recall of basic facts.
- The development and use of mathematical language.
- Persistence, reliability and accuracy through sustained work in mathematics/numeracy which requires some perseverance over a period of time.
- An awareness of the power of mathematics/numeracy to communicate, analyse and explain information and ideas.
- An awareness of the role mathematics can play in the world beyond the classroom - providing opportunities for problem-solving and using creative abilities.
- An ability to use mathematical skills as a powerful tool for other work and areas of study.

PRACTICES

RESPONSIBILITY OF EVERY MEMBER OF STAFF

Each member of staff is responsible for planning and teaching mathematics/numeracy in his/her class and allocates 20% of the total teaching time to mathematics/numeracy with regular lessons every day.

Medium-term (every half term) and short-term planning is done using agreed formats and identifies clear learning outcomes.

The development of good work habits is essential. Pupils are encouraged to work in a methodical and systematic way and to present their work clearly. All Mathematics is done using a writing pencil.

P1-P2 children work in blank exercise books or use appropriate worksheets.

P3-P7 children use blank and squared exercise books.

Any worksheets and samples of work are stored in folders and work is dated appropriately.

THE TEACHING APPROACHES

High quality teaching to clear objectives is the focus in the school.

The teaching approaches involve a balance of various approaches -

- (a) exposition/explanation - whole class
- (b) demonstration - whole class and group work
- (c) group work
- (d) pair work
- (e) individual work
- (f) use of ICT

The majority of group and pair work will be based on forming groups and pairs by ability. However, there may be occasions when mixed ability groupings or pairings will be appropriate.

Provision is made for teaching Mathematics to pupils identified with special needs. This will include differentiated activities within the classroom and consultation with the SENCO as appropriate. Provision is made for pupils who are identified as underachieving in Mathematics. Additional support is provided through the 'Yearn to Learn' Project.

There is an emphasis on investigational and problem solving work so that all pupils can learn strategies on the approach and methods to solve given problems and to develop mathematical thinking skills.

In their approaches all members of staff will, through effective questioning techniques, listen to, evaluate and discuss pupils' responses and intervene to provide guidance at appropriate moments.

MATHEMATICAL LANGUAGE

The development of appropriate mathematical language is promoted through the whole school.

Pupils progressively become familiar with the correct mathematical terms, definitions, signs, symbols and formulae appropriate to their level of understanding. Discussion is encouraged to enable pupils to clarify and articulate their mathematical thinking. Pupils are encouraged to use the conventional mathematical terms and to express their answers and methods of solving problems in mathematical language.

Key mathematical vocabulary will be displayed in each classroom.

APPLICATION OF MATHEMATICAL SKILLS, UNDERSTANDING AND KNOWLEDGE TO OTHER SUBJECTS

Pupils are given opportunities to develop and apply their mathematical skills in other curricular areas:

- Measuring in World Around Us
- Shape and Space in World Around Us, Art and PE
- Collection and presentation of data in World Around Us
- Number through the development of mental skills and its application in all areas
- Use of a range of ICT to enhance Numeracy

RESOURCES

The school uses Heinemann Mathematics and other schemes to support the teaching. These include Basic Skills in Maths, Mental Maths Daily Workout, Schofield and Simms Mental Arithmetic and Table Practice, Maths on Target, Maths Spotlight and Maths Support.

These commercial schemes are used to support teachers and pupils in teaching and learning of Mathematics/ Numeracy and their use is referred to in the school scheme of work and in teachers' planning.

The school is well resourced with a range of practical materials. Resources are stored in each classroom and some are stored centrally where appropriate.

Teachers use the Revised Lines of Development in planning to ensure that the statutory elements of Mathematics/Numeracy are covered throughout the school.

ICT

Pupils are given opportunities to develop and apply mathematical concepts and skills through the use of ICT. These opportunities are planned and set out regularly in teachers' planners. They are integrated into Mathematics/Numeracy teaching through Roamer, appropriate use of calculators and a range of software programmes. Achievement is praised and showcased.

HOMEWORK

Homework is set on a regular basis to support the work done in the class as follows:

Foundation Stage Oral or written homework once a week

Key Stages 1	Oral or written homework up to two times a week
Key Stage 2	Oral or written homework two times a week

INVOLVEMENT OF PARENTS

Parents are encouraged to participate in the development of their child's mathematics. Parents are informed of the mathematics curriculum through regularly set mathematics homework. In addition, parents receive the opportunity to discuss progress at parents' meetings, as well as receiving the annual report.

MONITORING AND EVALUATING PUPILS' ACHIEVEMENTS TO ENSURE ALL PUPILS MAKE APPROPRIATE PROGRESS

Assessment is an integral part of the learning process in Mathematics/Numeracy. It allows teachers to have a comprehensive picture of the progress and learning needs of each child. It involves pupils, teachers, Numeracy coordinator and principal.

PUPILS

- Review and evaluate their own work
- Review others' work
- Use verbal and written feedback to improve

TEACHERS

- Marking is diagnostic and supportive and as far as possible done through conversation with the pupil.
- Correct solutions are marked with a \surd and written comments are constructive and supportive
- Wrong solutions are marked with a **x** or **.** and pupils are encouraged to reason and seek the correct solution.
- Ongoing daily and weekly formative assessment procedures inform teachers' monitoring and evaluating pupils' achievements and inform differentiated groupings and forward planning.
- Teacher assessment, end of year tests and samples of work are kept in pupil folders
- Targets are set for individuals and groups

NUMERACY/MATHEMATICS COORDINATOR AND PIINCIPAL

- Monitoring teachers' medium term planners and pupils' work to ensure
 - learning outcomes are clearly identified
 - there is a balance of oral/mental, written computation and investigative/ problem-solving activities
 - relevant mathematical vocabulary is identified
 - there is appropriate differentiation
 - cross-curricular work is identified
- Tracking pupil performance in standardised tests and end of Key Stage Assessments
- Monitoring end of Key Stage assessment outcomes and setting appropriate targets to track school progress
- Leading discussion and providing support at staff meetings on a regular basis
- Providing ongoing support for teachers and pupils

CURRENT STANDARD – TARGETS

It is the responsibility of all staff to secure appropriate outcomes for all pupils. The Numeracy/Mathematics coordinator and principal monitor the outcomes of end of Key Stage statutory assessment in accordance with the SIP Strategy Document (Numeracy), 1998, and set targets to monitor progress. The school conducts an audit of Mathematics/Numeracy provision in line with the 3-year development plan.

REVIEW OF POLICY

The policy will be reviewed on a regular basis by the Numeracy Panel in collaboration with the Principal and whole staff.

B Mc Laughlin - Numeracy/Mathematics Coordinator
Reviewed September 2016.