

# Carrick Primary School



## Mathematics and Numeracy Policy

Numeracy Co-ordinators

Mr S Murdock

Mrs M McCann

December 2021

This Policy is an agreed statement of the intention of all staff in Carrick Primary School in relation to the teaching and learning of Mathematics and Numeracy.

Reviewed & Amended December 2021

# **Carrick Primary School**

## **School Vision Statement**

Forward Together "Ar aghaidh le chéile".

## **Mission Statement**

In Carrick Primary School we aim to provide a safe, caring and stimulating environment, in order to realise and celebrate the academic and non-academic potential of all our pupils. We expect our pupils to work hard and encourage parents to assist us in helping children to learn and to become lifelong learners.

## **School Aims**

We aim to:

- develop and strengthen each pupil's understanding and love of Catholic values by promoting the Catholic ethos throughout the school;
- create a safe, enjoyable learning environment, in which effective learning is facilitated and quality teaching is provided;
- implement all aspects of the Northern Ireland Curriculum;
- help our pupils to develop a positive attitude towards life and a love of learning;
- value, respect and nurture every child in our care;
- encourage pupils to respect themselves and others and to support and care for one another;
- equip our children with the necessary life skills to enable them to participate in a fast changing society; and
- involve the parents, Board of Governors and wider community in the life of the school and in the holistic development of the children in our care.

In operating our Mathematics and Numeracy Policy, we will adhere to the statutory legislation and Catholic ethos, and will fulfil our statutory duty under the Northern Ireland Curriculum, by having regard to the Code of Practice for Special Educational Needs, the Special Educational Needs and Disability Order and the Supplement to the Code of Practice.

## Carrick Primary School Mathematics and Numeracy Policy

In Carrick Primary School we have agreed to adopt the following definition of Numeracy as defined by the Northern Ireland Curriculum:

*"Numeracy is the development and application of Mathematics across the curriculum and in real life situations. Numeracy skills should help children to make informed and responsible choices and decisions throughout their lives".*

The term Numeracy brings with it connotations of real life applications and the use of Mathematics as a natural tool throughout the school. It should be seen as being linked to all subjects. Numeracy is both a key skill and a life skill. We see Mathematics as being synonymous with Numeracy throughout the school.

In Carrick Primary School we value every pupil and the contribution they make. We believe that every child should experience success and should be encouraged to develop their skills in accordance with their level of ability. We aim to equip our children with the necessary life skills to allow them to participate fully in the society in which they live.

### Aims

1. To develop within our pupils a positive attitude towards Mathematics and Numeracy through promoting the subject in a relevant and interesting manner.
2. To develop the children's confidence, pleasure and success in the subject.
3. To give children an appreciation of Mathematics and Numeracy as a creative subject, of its structure and pattern, and of its value to the environment.
4. To develop within our pupils an understanding that Mathematics and Numeracy has relevance across the curriculum and value in real-life situations.
5. To develop the pupils' logical thinking and their understanding of mathematical relationships by involving the pupils in well planned investigations and process activities.
6. To plan and develop the use of Numeracy language which reflects the children's ability and experience.

7. To foster the children's Thinking Skills and Personal Capabilities.
8. To provide our pupils with opportunities which develop their understanding of Number, Measures, Shape and Space, Handling Data and Processes.
9. To develop our pupils' ability to make mental calculations and to visualise number and its use throughout all areas of Mathematics.
10. To make appropriate use of ICT to promote teaching and learning in Mathematics and Numeracy.

### **Classroom Management**

It is every teacher's duty to ensure that his/her classroom is managed well. We feel that the following elements should be incorporated: -

- Approaches to classroom management should be varied to allow for individual, pairs, group and whole class teaching.
- Grouping of pupils should be flexible. Pupils may be placed in ability or mixed ability groups according to the topic and the demands placed upon the pupil. Where possible pupils should be given opportunities to develop both their own and group working skills and communication skills. There should also be opportunities for pupils to work independently.
- Children should, where appropriate, be encouraged to communicate and discuss their findings with other children and adults.
- Classroom assistants will support the teachers in the delivery of Mathematics and Numeracy.

## Continuity and Progression

1. Mathematics and Numeracy is regarded as a core subject within the school curriculum.
2. In order to ensure continuity and progression the school has formulated schemes of work for each year group. This planning is further enhanced by the development of half termly plans/grids for each year group and by teachers' short term plans.
3. Our Mathematics and Numeracy schemes fully reflect the Northern Ireland Curriculum.
4. The content of the schemes encourages active learning for our pupils, and facilitates a structured and sequenced set of experiences for each pupil as they progress through the Key Stages.
5. There is a planned development of the mathematical language used throughout the school.

## Teaching Strategies

In order to develop our pupils' Mathematical and Numeracy skills, it is important that our pupils are exposed to a wide range of Mathematical experiences and related activities.

### Assessment for Learning

Assessment for Learning is the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go next in their learning and how best to get them there.

**AfL** involves the following key actions:

- Sharing learning intentions;
- Sharing success criteria;
- Giving feedback to pupils;
- Effective questioning; and
- Encouraging pupils to assess and evaluate their own and others' work.

### **Other Strategies Used**

- Investigations
- Problem Solving
- Recording
- Discussions
- Games
- Use of apparatus
- Learning through Play/Active Learning
- ICT/Interactive White Boards/Ipads
- Mental Maths
- TS & PC
- STEM
- Izak 9

### **Thinking Skills and Personal Capabilities**

Thinking Skills and Personal Capabilities are an integral part of Numeracy and Mathematics. By developing thinking skills, we aim to engage pupils in better quality thinking, to go beyond the acquisition of knowledge and to deepen children's understanding. Developing personal capabilities provides opportunities for pupils to take the initiative, work together and become more self-directed in their learning. Through the Mathematical experiences offered the children's skills and capabilities are developed.

### **Thinking Skills and Personal Capabilities involves the following key actions:**

Strand 1: Managing Information;

Strand 2: Thinking, Problem Solving and Decision Making;

Strand 3: Being Creative;

Strand 4: Working with others; and

Strand 5: Self Management.

### **Role of Homework**

The purpose of the homework is to:

- Reinforce work done in school;
- Give parents an insight into the type and range of activities in which children are engaged in at school; and
- Allow pupils to further investigate topics.

## **Resources**

The school uses the New Heinemann as its primary resource. This is also supplemented by other schemes and by teacher-generated resources, games and ICT software. Each teacher has his/her own resources within his/her classroom. It is important that resources are readily available and accessible to children to help develop their mathematical skills. Resources are reviewed in line with the "School Development Plan" and additional resources are requisitioned, when required.

## **Role of ICT**

ICT is an integral part of Mathematics and Numeracy and is used to help enhance our pupils' understanding. ICT is used:

- To consolidate our pupils' learning;
- To further develop our pupils' Numeracy skills;
- To provide our pupils with a variety of stimuli, therefore developing their mathematical skills and capabilities;
- To provide our pupils with a variety of challenging learning experiences;
- To promote pupils' enjoyment of Mathematics and Numeracy;
- To provide pupils with opportunities to take part in co-operative activities.

Opportunities should be sought in mathematics to use ICT to develop the children's learning.

## **Use of Calculators**

Calculators, like computers, are a means of consolidating our pupils' Numeracy skills. It is necessary that our pupils are given the opportunity to develop their calculator skills in Key Stage One and Two. It is the intention that calculators should be used as a checking device rather than a child's first means of calculation. However, we believe that pupils do need to develop skills in relation to using calculators.

## **Role of Parents**

The school views parents as one of its greatest resources and good relationships between parents and staff are nurtured as much as possible.

- Parents are made to feel welcome to discuss their concerns about their children's progress.
- It is school policy to report on pupils' progress on at least two occasions during the school year. In the first term of the school year, parents are invited to meet with teachers to discuss their children's progress. Parents are also provided with a written report at the end of the school year.
- Teachers are available for consultations with regard to individual difficulties in Mathematics and Numeracy if they arise.

## **Assessment**

Assessment is an integral part of the N.I. Curriculum. It provides valuable information in relation to pupils' performance and helps to inform teachers' future planning. It plays a crucial role in improving learning and raising standards.

The school uses Progress in Maths (PiM) 8-11 standardised tests from P4-P7 inclusively. This testing is carried out in May each year. Year 4 and Year 7 pupils are also formally assessed in Mathematics and Numeracy and the levels children attain are submitted to the Department of Education. We have also devised an internal end of year Mental Maths test for P1-P7 pupils. In September of each year, the Non Reading Intelligence Test (NRIT) is administered to P4 and P6 year groups. The results of PiM., NRIT, and the Mental Maths tests are recorded in SIMS/Assessment Manager and Public R.M. and are used to inform teachers' planning for the following year.

## **Staff Development**

It is the policy of the school that teachers and classroom assistants are encouraged to continually develop their knowledge and skills through collaboration and in-service training. Teachers are also encouraged to make use of the Internet, Interactive White Boards and Ipads as part of their development. The Co-ordinators retain details of all Numeracy Training.

## Special Needs

It is each teacher's duty to be aware and address, where possible, the specific needs of less able and/or very able pupils. It is each teacher's responsibility, in consultation with the SENCO, to develop Individual Education Plans. Children's progress will be monitored regularly. Appropriate resources and support will be accessed to help meet the needs of the less able and more able children.

## Evaluations

As professionals, teachers are expected to evaluate their approaches to the teaching of Mathematics and Numeracy. Teachers evaluate half-termly planners, their annual class action plans and the targets set. Co-ordinators review their one year and three year action plans.

## Criteria for Target Setting

The following elements contribute to the setting of targets:

- Teachers' professional judgements;
- Results of Standardised Tests PiM [P4-P7];
- NRIT (P4 & P6);
- Half-Termly Test results [P1-7];
- Mental Maths Assessment/Results; and
- Information from parents and previous teachers.

## Conclusion

This policy was reviewed in December 2021 by the Numeracy Co-ordinators in consultation with staff, pupils, parents and governors. It will be reviewed every two years, or sooner if required, to ensure that the information contained is appropriate.

Signed: Mrs A Cassidy (Principal)

Signed: Mr G Murdock (Chairperson of Board of Governors)

Date: December 2021

Date Review: December 2023