



# Maths Policy

---

## Key Document Details

School Name: Grange Infant School

Version no: 2

Author: Sophie Moran

Owner: E Rushen

Approved by: Principal

Ratified date: September 2022

Interim review date: n/a

Next review date: September 2023

“Learning math is more like taking a meandering nature walk than like climbing a ladder of one topic after another. Children need to wander around the concepts, notice things, wonder about them and enjoy the journey.”

## The Nature of Mathematics

‘Mathematics provides a powerful means of communicating thoughts and ideas. It is used to present information and concepts through figures, letters, tables, charts, diagrams and drawings’.

## Introduction

The purpose of this document is to ensure that the National Curriculum for Mathematics 2014 is implemented in a consistent manner throughout the school. Mathematics has the power to predict, and with it, the requirement to make and check hypotheses. This makes it a useful tool for other subject areas, for everyday life and for the world of work.

## Aims

Through the teaching of mathematics, we aim to:

- promote enjoyment of learning through practical activity, exploration and discussion;
- promote confidence and competence with numbers and the number system;
- develop the ability to solve problems through decision-making and reasoning in a range of contexts;
- develop a practical understanding of the ways in which information is gathered and presented;
- explore features of shape and space, and develop measuring skills in a range of contexts;
- understand the importance of mathematics in everyday life
- ensure our children understand it’s ok to make mistakes and build resilience within them to learn from them.

## Teaching Context and Learning

The learning intentions and the why of each lesson should be clear to provide a focus so that children see a purpose to their math learning. Pupils will be given the opportunity to experience a wide variety of mathematical activities intended to develop their knowledge and expertise.

**Skills:** These should be practiced thoroughly e.g. use of mathematical equipment, reading scales etc.

**Facts:** Children should be encouraged to learn and use the correct vocabulary in their math work and talk about what they are learning to their peers, teacher or other adults. They should also be encouraged

to generate their own mathematical questions and ideas, whenever possible.

**Concepts and Understanding:** Activities should show continuity and progression with concrete experience before moving on to conceptual learning.

**Strategies and processes:** These should include practical tasks, problem solving and investigative approaches as well as math games.

**Personal:** Children should have opportunities to work through a problem independently and as a member of a group as well as taking part in whole class discussions and activities.

The main emphasis will be on giving pupils the opportunity to become resilient learners who are confident and competent with number and the measures in order to develop a deeper understanding of what is being taught. There is an emphasis on the importance of developing strategies for tackling problems as well as introducing different ways in which our pupils can communicate their findings.

In all classes children have a wide range of mathematical abilities. We recognise this fact and provide suitable learning opportunities for all children. We follow a 'do it, secure it and deepen it' approach at Grange Infants with a range of resources and activities pitched at age related expectations. However, we adapt/ scaffold some activities to support the learning of our SEND and greater depth children. This 'Explore it', 'Embed It', 'Explore It' structure in our math teaching ensures a consistency throughout the school. Using and applying mathematics will form an important part of the overall provision.

The content of the New National Curriculum for Mathematics 2014 will be used as the basis for planning the work. We use the 'Cando Math' approach alongside a range of other approaches and support material such as White Rose Scheme of Work, Nrich and NTECM. We have adopted the 'mastery' approach to teaching mathematics, whereby specific topics (eg. Fractions) are focused upon for a longer period of time in order to develop a deeper understanding of a concept.

When teaching Mathematics, teachers consistently use mathematical language and questioning to deepen children's understanding and answers. We use displays to encourage thought and discussion within our pupils as well as them acting as an additional resource to support children's learning. Mathematical equipment is easily accessible for children to encourage and develop problem solving skills and independence.

## **Resources**

The Math champion will monitor the equipment and teacher's resources, updating, renewing and replacing these items when needed. A basic set of math resources is available in each class for children to access to support their learning. The children are taught and encouraged to take responsibility and care for their own equipment. A range of computing resources is available to support mathematics teaching.

## **Assessment**

All assessment will link closely with the school's assessment policy. In math, assessments will be carried out on a regular basis at Data Points throughout the year using a combination of Teacher Assessment and the 'Cando Math' termly assessment materials. A verbal report will be given during Parents' Evenings, and pupils will receive a record of their progress in a mid-year report and a yearly report to parents.

## **Equal Opportunity**

Equal opportunity will be extended to all pupils. All children have an entitlement to access the work outlined within the New National Curriculum for Mathematics 2014 at an appropriate level.

## **Health and Safety**

We recognise the importance of close supervision of the children during activities undertaken outside the classroom. We invite parents and Teaching Assistants to support the class teacher to ensure the safety of the children on such occasions.

## **Special Needs**

Those children who are recognised as having special educational needs will follow a similar scheme of work to that of their peers. However, the work, if necessary will be differentiated to meet individual children's needs.



## **Review of the Policy**

At the end of each academic year, this policy will be reviewed and if necessary, revised in the light of any changes made locally and nationally.