

GREAT CORBY SCHOOL & NURSERY

Mathematics Policy

2017 - 2020

APPROVED BY 1:

Name: K Williamson

Position: Headteacher

Signed: **Williamson**

Date: 13.4.18 Review Date ²: Apr 2020

¹ The Governing Body is free to delegate the approval of this Policy to a Committee of the Governing Body, an individual Governor or the Head teacher

² The Governing Body are free to determine the review frequency of this Policy

At Great Corby Primary School, we recognise the importance of developing confident mathematicians who can apply their skills in practical and real-life situations.

The Nature of Mathematics

Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.

(National Curriculum, 2014)

Aims

The purpose of mathematics in our school is:

To implement the current legal requirements of the Foundation Stage (FS) and the National Curriculum (NC)

For our children:

- to become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- to reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- to solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Subject Organisation

Foundation Stage

Teachers and practitioners support children in developing their understanding of mathematics in a broad range of contexts in which they can explore, enjoy, learn, practise and talk about their developing understanding. This area of development includes seeking patterns, making connections, recognising relationships, working with numbers, shapes and measures, and counting, sorting and matching. Children use their knowledge and skills in these areas to solve problems, generate new questions and make connections across other areas of learning and development.

Children in the EYFS learn by playing and exploring, being active, and through creative and critical thinking which takes place both indoors and outside. We recognise that children

learn through routine, continuous provision and incidental learning opportunities, as well as planned sessions and activities. Mathematical understanding can be developed through stories, songs, games, routine, questioning, imaginative play; child initiated learning and structured teaching.

In our nursery, daily group activities are time tabled and planned. In reception, daily time is dedicated to mathematics. Overall these lessons include a good balance between whole-class work, group teaching and individual practice. In the autumn term, these sessions are similar to those in nursery; however, throughout the year there is a gradual shift where adult-directed sessions are extended in preparation for Year 1.

KS1 and KS2

In KS1 and KS2, teaching follows the National Curriculum's Mathematics Programme of Study and involves a daily mathematics lesson Monday-Thursday.

Each class teacher is responsible for the mathematics in their class.

Subject leaders for Mathematics are Miss Williamson and Mrs Sanderson.

Planning

Long term planning

The National Curriculum for Mathematics 2014 and the Early Learning Goals (Number, Shape Space & Measure) provide the long term planning for mathematics taught in the school.

Medium Term Planning

Years 1-6 use FOCUS Maths to structure the year.

Short Term Planning

A short term plan outlines a teaching sequence, taking account of where pupils are in their learning, where they need to go and how they are going to get there.

A high proportion of lesson time is devoted to direct teaching of whole class or groups. A variety of carefully chosen resources are used to support teaching and learning.

Pupils' Records of Work

Children are taught a variety of methods for recording their work and they are encouraged and helped to use the most appropriate and convenient method. Children are encouraged to use mental strategies before resorting to a written method. All children are expected to work tidily and neatly when recording their work. When using squared paper one square should be used for each digit.

At KS1 1cm square exercise books are to be used. This changes to 7mm square exercise books by the end of Y3.

EYFS record informally within the setting. For example:

- On the playground
- On whiteboards
- Using jigsaws
- Physically ordering numbers

Marking

See School Marking Policy

Assessment

Teachers make regular assessments of each child's progress and record these systematically. A record of each child's attainment against the key objectives for the appropriate year group is recorded in their individual PET Books.

Short Term

Children's class work is assessed frequently through

- Regular marking
- Analysing errors
- Questioning
- Discussion

This is used to inform future planning and teaching. Lessons are adapted readily and short term planning is evaluated and annotated in light of these assessments.

During lessons, use of FOCUS maths, Oxford Owl Teaching for Mastery and White Rose documents help to assess and challenge 'rapid graspers'.

Medium Term

Summative assessments are made at the end of each half term to monitor children's knowledge and understanding of concepts taught. Commercial resources such as Rising Stars are used to assist the assessment process.

Long Term

EYFS are assessed against Development Matters.

At the end of Reception, the children are assessed against the Early Learning Goals.

Y1-6 are assessed against the year group expectations.

Y2 and Y6 complete SATs assessments every May.

Resources

There is no one selected published mathematics scheme that is available to teachers. In the main, the resources we use are an amalgamation of tried and tested activities, copyright free material from various sources and computer programmes such as Education City or Purple Mash.

Teachers are responsible for their own resources, although some whole school resources are available for use.

Inclusion/Equality Statement

We believe that our broad and balanced mathematics education is the entitlement of all children, regardless of ethnic origin, gender, class, aptitude or disability.