

Thornhill Primary School



Mathematics Policy

Date: Sep 2018

Review date: Sep 2019

Introduction

This policy outlines the purpose, nature and management of the mathematics taught at Thornhill Primary School. Mathematics is both a key skill required within school and a life skill essential to everyday life. The implementation of this policy is the responsibility of all teaching staff.

Aims

Our aims in mathematics teaching are:

- To enable pupils to be proficient, competent and confident mathematicians and have the ability to solve mathematical problems.
- To promote positive attitudes towards mathematics developing pupils' confidence.
- To promote enjoyment and curiosity in mathematics and understanding mathematics in the world.
- To use mathematical equipment and vocabulary and develop both mental and written strategies.
- To develop the ability to communicate mathematics with confidence.
- To develop an understanding of mathematics through a process of enquiry, experiment, reason and investigation.
- To develop cross-curricular links in mathematics.

National Curriculum

At Thornhill Primary School we teach the National Curriculum 2014 Programmes of Study Key Stage 1 and 2.

Reception & Nursery follow the EYFS curriculum.

The national curriculum for mathematics aims to ensure that all pupils:

- 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.
- **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can **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.
- By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Teaching and Learning

At Thornhill Primary School we believe that all children are entitled to a broad mathematics curriculum in which their learning needs are identified and met. Pupils should experience a range of practical and written activities on number and place value, calculation, measurement, geometry and statistics, following the National Curriculum 2013.

Mathematics teaching will be in line with the National Curriculum and Revised Early Years Curriculum in the EYFS and therefore following the guidance we aim to:

- The highest priority will be given to the teaching and consolidation of mental arithmetic strategies.
- Teachers will take every opportunity to ask questions to deepen understanding.
- Teachers will probe and challenge answers and where appropriate ask for the alternative strategies or explanations.
- Teachers will seek to ensure that every child has the opportunity to use and apply their mathematical knowledge on a regular basis.
- Teachers will seek to ensure that every child has the opportunity to hear quality mathematical language as well as using and applying mathematical language on a regular basis.
- Teachers will devise work which includes every child in the class.
- Written methods of calculations will be taught in accordance with the new 'Calculations Policy' for the 2014 National

Curriculum and is supplemented by the 'Guidance for Maths at Thornhill Primary School' document.

- Teachers will use a range of ICT resources to enhance their maths teaching and the children will be given regular access to ICT to reinforce and consolidate their learning. Calculators will be introduced only at the end of Key Stage 2.
- There will be opportunities to provide maths in all other subjects and in and around school e.g. fruit tuck shop using money, telling the time at lunchtime.
- The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace and that the majority of pupils will meet the National Curriculum Statements at the end the year. Any child who has not met all the statements at the end of the year, will need interventions and support to meet these statements at the beginning of the next year.
- Teachers will respond to individual needs by careful targeted questioning.
- Pupils with SEND will work from statements at their own level and work will be differentiated and personalised to their learning needs.
- By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Teaching and Learning

Mathematics is taught daily in KS1 and KS2 with an additional mental slot during the day.

Reception and Nursery class are taught throughout the day through a variety of practical activities following the EYFS curriculum.

In school, we use the Teejay Maths and Rising Stars Maths Schemes of work to supplement teaching, as well a broad range of mathematical equipment and resources and ICT resources and programmes.

KS1 and KS2 children are given weekly maths facts to learn and results are recorded. Children receive a small prize for 100% each term and for the full academic year.

From Year 2, every child has their own individual 'Times table Record Sheet' to record progress by achieving stickers. Children who can recite all their timestables facts off by heart receive a 'Timestable pencil' from Mrs Green.

Once a year there is a Maths themed Golden Day.

Assessment, Recording and Reporting

To develop learning, pupils will be continually assessed using a variety of strategies

- Formative assessment - observation, questioning, marking of written work
- Summative assessments – CEM, Cornerstone, and SATs (Year 2 and Year 6).

Information is recorded using the school's tracking system (SIMS) and then used to inform planning and identify children for intervention and support.

Parent's Evenings are held 3 times per year and parents/carers are updated on their child's progress in maths:

- Autumn Term Parent's Evening - National Curriculum statements for each Year group are given to parents/carers at the Autumn Parent's evening, as well as a 'Calculations Guidance Document for Parents'.
- Spring Term Parent's Evening – Interim report given to parents/carers which includes mathematic targets.
- Summer Term Parent's Evening – Annual report and National Curriculum Statements given to parents/carers.

Homework

In Reception and Nursery children receive weekly tasks that reflects the EYFS curriculum. Activities are practical and help children to recognise that Maths is all round them in their everyday lives.

Pupils in KS1 and KS2 learn weekly maths facts and are tested on a Monday. These maths facts are given out on a Tuesday and sent home in the child's planner to practise.