Maths Policy

September 2021

To be reviewed

July 2023

Maths Policy

Introduction

This policy outlines the teaching, management and organisation of Maths at St. Nicholas-at-Wade CE Primary School.

Maths is:

"the study of patterns abstracted from the world around us – so anything we learn in maths has literally thousands of applications, in arts, science, finance, health and leisure!" Professor Ruth Lawrence, University of Michigan (re-printed in 1999 National Curriculum)

Mission Statement

At St. Nicholas –at – Wade we believe that all pupils deserve and need a fully rounded curriculum to become confident, independent lifelong learners. Maths will play a major role in the lives of each of every child in the school – sometimes without them realising it. We believe the children should be taught to be confident with numbers, calculations, measuring, shape, data and statistics and we hope to teach the relevance and usefulness of maths across many other subjects.

Key Aims and Objectives

Aims		Objectives
1.	Children to become fluent in the fundamentals of maths	 To complete increasingly complex problems as they move through the school. To use a variety of mental method,
		 Formal written methods and jottings to increase conceptual understanding and to gain an ability to apply knowledge rapidly and accurately.
2.	Children to be taught to reason mathematically.	Looking for relationships between numbers and developing an argument to justify what they are doing and providing proof using mathematical language.
3.	To solve mathematical problems	 Applying what they have learnt to a variety of problems. Breaking down a problem into a series of simpler steps. Persevering in seeking solutions Checking that their answer is reasonable (often by estimating first) but always relating their answer to the original question.
4.	To help pupils understand the language and specialist vocabulary of maths and to use technical	 Ensure that pupils are taught specific mathematical vocabulary associated with each unit of work and that key

terminology accurately and precisely.	 words are displayed prominently in classrooms. Encouraging correct use of language such as inverse, number operation, divide etc
5. To realise that maths is an important life skill.	 Children coming up with their own word problems to fit a number sentence. Children realising that they are sometimes using maths without even realising it. Children enjoying maths and finding it fun!
 To apply mathematical knowledge across the curriculum. 	 Realisation of the link between maths and science. Application of maths in other subjects such as music, geography, history, art etc
7. To track pupil progress in Maths to inform future learning opportunities.	 Use teacher assessment to track pupil progress using Essex Target Tracker. Use informative feedback following termly assessments and allow pupils time to respond to this feedback to ensure progress. Carrying out a gap analysis following an assessment and ensuring that gaps in the children's knowledge are addressed.
8. To use ICT in support of the maths curriculum	 Calculators used near the end of Key Stage Two Use of Number Shark, My Maths and participation in World Maths Day
9. To celebrate pupils mathematical work and achievements.	 Each classroom to have a display or working wall dedicated to maths. Children who are producing particularly impressive maths to be recognised during Collective Worship.

Curriculum

The school has adopted the White Rose maths programme which ties into the 2014 National Curriculum. This is taught from EYFS to Year 6 and forms the basis for our planning, ensuring that we have the required coverage across each year and across the school as a whole.

A cross curricular approach is encouraged and links are made where appropriate - teachers are aware of the links between Maths and Science for example. The new National Curriculum makes it clear that children should be taught about the relevance of maths to their lives out of school. Children are taught to realise that maths doesn't just happen between 11 and 12 at school but carries on before and following a maths lesson.

Assessment

Formative: Teachers will continually assess the progress of their pupils through day to day lessons in class and End of Unit White Rose assessments. Children who do not understand a particular concept or technique should be noted and extra support etc provided to ensure that they grasp the area causing problems.

Summative: Teachers are expected to provide a termly assessment, based on that term's teaching and assessed according to the National Curriculum for each Year Group. This data is then recorded on Essex Target Tracker so that as accurate a level as possible can be seen for each child.

Calculations

The way in which we teach calculations is set out in our Calculations Policy. This is published on our School Website so that parents can see how the four number operations are taught at St Nicholas at Wade and the different methods the children should be using. To ensure that this policy is adhered to, use of it is a focus of lesson observations and work scrutiny. The Calculations Policy is updated biennially.

Presentation

As teachers, we strive for our children to be the best that they can be and this includes the presentation of their maths work. Most work is completed on squared paper or worksheets, and should include an underlined short date, underlined LO (Learning Objective) and generally be completed with a sharp pencil. To help with the accuracy of their written calculations, children are taught to write one digit in each box. By the time they begin in Class 3 we expect *most* children to be doing this reliably. When solving word problems, children are taught to include the unit of measurement (m, kg, sweets, cars etc) and not simply a numerical figure which carries no meaning.

Resources

We are lucky to have access to a range of manipulatives in school. These are kept in each classroom with other materials being in a central resource room. We also have access to on-line resources such as My Maths.

School Environment

Teachers are encouraged to take maths out of the classroom. Children carry out measurement tasks in the hall, on the playground and field and look round the school searching for different shapes. The sort of 'hands-on' maths really captures the child's imagination.

Equal opportunities

All pupils will have an equality of access to a broad and balanced maths curriculum, irrespective of gender, ethnicity or special educational needs.

Additional Educational Needs/Special Educational Needs

All pupils will have access to the full National Curriculum for maths. Pupils with specific learning difficulties and disabled pupils will be provided with modified learning programmes, resources and equipment appropriate to their needs. For most pupils, curriculum access will be enabled through the use of modified teaching methods and the deployment of learning support assistants.

This policy should be read in line with our Teaching and Learning policy and Subject leader job description.

Written By: Tim Neal (September 21)

Approved by governors:

To be reviewed: July 2023