



Policy for Mathematics

"We seek to develop the whole child within a Christian Ethos preparing them for a happy, healthy and fulfilled life ahead."

Reviewed: November 2014
Date for Next Review: November 2017

Introduction

- Mathematics is one of the three core subjects in the National Curriculum (2014).
- This policy outlines the purpose, nature and management of the Mathematics taught in our school.
- The school policy for Mathematics reflects the consensus of opinion of all the staff. It has been drawn up as a result of staff discussion and has the full agreement of the Governing body.
- The implementation of this policy is the responsibility of the Head teacher and all the teaching staff.
- The Mathematics Policy should be read in conjunction with the Calculation Policy, Equal opportunities policy, marking policy, assessment policy and teaching and learning policy.

National Curriculum (2014) Aims

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 have conceptual understanding and are able to recall and apply their knowledge rapidly and accurately to problems
- 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.

School Aims

- To promote enjoyment and enthusiasm for learning through practical activity, exploration and discussion.
- To develop logical thinking and reasoning skills through a natural curiosity and investigative approach.
- To promote confidence and competence so that children are 'proud to shine' about their achievements.
- To develop a thorough knowledge and understanding of numbers and the number system demonstrated by rapid and accurate recall.
- To develop the ability to solve problems through decision-making and reasoning in a range of contexts.

- To develop a practical understanding of the ways in which information is gathered and presented.
- To explore features of shape and space, and develop measuring skills in a range of contexts.
- To apply mathematical skills in everyday life.

Teaching and Learning

Mathematics is taught according to the objectives of the National Curriculum 2014 Framework.

The weekly plan will demonstrate:-

- a) a progression in children's learning
- b) a range of teaching and learning strategies being employed
- c) Opportunities for recap and revision
- d) Opportunities for investigation and problem solving
- e) Use of apparatus by all to consolidate learning
- f) Equality of opportunity for all.
- g) A time allocation of at least 1 hour a day

The children will be taught methods as outlined in our Calculation Policy (2014)

Cross Curricular Links

Teachers are encouraged to apply and develop children's mathematical understanding by exploring mathematical concepts through the study of other curricular areas e.g. datahandling in Science. Aspects of other core and foundation subject areas may be linked with Numeracy where appropriate and where it is considered beneficial to pupil understanding and achievement.

Assessment, Recording and Reporting.

EYFS

On entering the school, children will be observed at work and play in order to make an entry assessment of what they already know and can do. Early Years Foundation Stage Profile scores are used to establish a baseline measure of individual ability.

Throughout the year staff continue to monitor children's progress formally and informally, in order to plan purposeful and appropriate activities to support them in the next steps in their learning.

By the end of the Reception year an Early Years Foundation Stage Profile booklet will be completed for each child. This sums up their progress and learning needs at the end of the Early Years Foundation Stage. The Early Years Foundation Stage Profile is based on ongoing observations and assessments over all six areas of learning within the Early Years Foundation Stage.

Each child's typical developments and achievements will be recorded on assessment scales. Completed Profiles will be used as part of our annual report to parents. The school will submit numerical results to the LA as they are required and as statutory assessment at the end of the Early Years Foundation Stage.

Years 1-6

Formal summative assessment of all pupils takes place on an ongoing basis throughout the academic year using School Pupil Tracker Online. The data is analysed termly to identify cohort and individual pupil performance over time in comparison to expected standards and knowledge and understanding of specific aspects of mathematical understanding. Comparison of groups of children e.g. FSM, Girls/Boys, SEN will be made and discussions held as to how we can 'Close the Gap'.

Formative assessment takes place daily through oral and written feedback to the child on their performance and targets for improvement.

Class assessment takes place as appropriate during the Plenary session or at the beginning of sessions.

Parents are informed of their pupils' performance informally through parent teacher liaison. This is discussed more formally at parent-teacher consultation evenings and through the annual written statement on their child's progress about Mathematics during the Spring or Summer term.

Provision for children with Special Educational Needs

Teaching and Learning for children with Special Educational Needs at School Action level is managed through differentiation and intervention within the class setting or withdrawn groups as appropriate. Work of an appropriate level is administered with support where appropriate from an assisting adult. Intervention of withdrawal groups may be established in the short or long term using various materials. Intervention and support plans will be subject to regular review as outlined in the SEN Code of Practice (2014) and managed in accordance with the advice provided by specialist outside agencies if necessary.

Teaching and Learning Objectives and Activities for all children in the class will be identified on the weekly class plan for Numeracy.

Provision for children recognised as Gifted and Talented

Teaching and Learning for children with recognised Gifts and Talents is managed through extension within the class teaching and enrichment through the provision of additional learning opportunities of an appropriate level of challenge.

These may include:

- Accessing work using objectives from academic groups in advance of their age.
- Using established knowledge to develop their problem solving and knowledge application abilities
- Being challenged to complete specific tasks of a standard appropriate for their heightened level of ability.

Monitoring, Review and Development

School performance in Mathematics can be monitored and reviewed by the following means:-

- monitoring of planning
- Classroom observation
- Scrutiny of children's work
- Work sampling and moderation
- Seeking the views and opinions of the teaching team
- Seeking the views and opinions of the children
- Seeking the views and opinions of the parent body
- Analysis of pupil attainment and achievement, both individually, as a cohort and as a class
- Analysis of pupil performance in different aspects of mathematical understanding
- Governor visits

Opportunities for improvement in provision are identified in the School Improvement and Development Plan.