

Maths Policy

Updated in line with New Curriculum: November 2014 (A Patel)

Approved by Governors:

Introduction

Mathematics is a tool for everyday life. It is a whole network of concepts and relationships which provide a way of viewing and making sense of the world. It is used to analyse and communicate information and ideas and to tackle a range of practical tasks and real life problems. It provides the material and means for creating new and imaginative worlds to explore.

Our aims are:

- ✓ To promote the role of mathematics in the curriculum and its relevance as an essential life skill.
- ✓ To ensure that children enjoy their mathematics as a subject and experience success and progress
- ✓ To provide opportunities for children to learn through practical, investigative, mental, oral and problem solving activities and to experience mathematical language in context.
- ✓ To ensure that the children can make links between mathematics in the school and the wider community
- ✓ To ensure that the children can make links between mathematics and other subjects
- ✓ To provide an individualised curriculum, tailored to the needs of every pupils

Purpose

- ✓ To establish an entitlement for all pupils
- ✓ To establish expectation for teachers of this subject
- ✓ To promote community and coherence across the school
- ✓ To state the school's approaches to this subject in order to promote public, and in particularly parents' and carers' understanding of the curriculum.

Foundation Stage

Maths is incorporated into everyday activities and links with child initiated play, as well as being taught daily for 45 minutes as a discrete subject.

Timetabling/Lesson outline

In KS1 and KS2 pupils take part in a one hour daily maths lesson. In addition, pupils practise mental maths every morning for 5 minutes after registration.

A mathematics lesson consists of 3 parts:

1. Oral/mental starter – 10 minutes of rapid maths to warm up pupils thinking skills and engage key facts for the lesson. This is a visual, active and inclusive activity that may not be recorded
2. Main – 40 minutes where the LO is introduced, key concepts and skills are modelled and practised followed by an independent task.
3. Plenary – 10 minutes where the class re group and consolidate their learning

Planning

The school follows curriculum planning requirements from the National Curriculum.

- Teachers plan in a block teaching approach, where skills are taught, practised and built on in a cycle of 5 blocks per term.
- The Hamilton Trust scheme of work is available for teachers to use as a support in planning activities and resources.
- Lessons are made cross curricular with current topics, where possible.

Assessment

Assessment is vital to ensure secure coverage, pupil progress and high attainment. There are two forms of assessment which teachers undertake; formative and summative. These are regularly monitored by SLT and SLs.

Summative assessment is characterised as assessment *of* learning and is contrasted with formative assessment, which is assessment *for* learning.

Formative

Formative assessment is defined as the bidirectional process between teacher and student to enhance, recognise and respond to the learning. It is a self-reflective process that intends to promote student attainment. Teachers use daily assessment to adapt the lessons to meet the learner's needs. This process can also help students take control of their own learning

Techniques in place are:

- Questioning (blooms Taxonomy)
- Open ended tasks
- Independent application of knowledge
- Guided groups where teachers have close interaction with students
- Success criteria
- Peer/self assessment
- 3mi
- Marking (see policy)

Formative assessment enables teachers to adjust the current lesson or subsequent lessons according to the pupils individual needs. Teachers use the Hertfordshire Grid for Learning Assessment Framework to support their formative assessment of the children, updating their assessment files regularly to show progression within the phases.

Summative Assessment

Summative assessment refers to the assessment of the learning and summarises the development of learners at a particular time. This process can be diagnostic to identify any weaknesses and then build on that using formative assessment. Outcomes from these assessments are cross referenced against Hertfordshire Grid for Learning Assessment Framework and overall assessment of the pupil's progress is made at the end of each term. This is then inputted into the county's database to be analysed further. Overall assessment is tracked and analysed by the class teacher, subject leader and SLT.

Evidence

Evidence of assessment is gathered regularly for three pupils in every class, chosen from vulnerable groups. Evidence can be pupils work, photos or problem solving activities. Evidence is annotated by the teacher to show the next steps for learning.

Strategies

There are many strategies that teachers use to ensure inclusion, enjoyment and attainment. Some or all of these are present in every maths lesson

- Blooms taxonomy of questions
- Thinking skills
- Cross curricular opportunities
- LO phrased in child friendly language and can be in the form of a question
- Regular open ended problem solving task where pupils apply knowledge
- Number is taught through measure
- Staff follow calculation policy to ensure progression through the years (refer to additional Calculation Policy 2014)
- Vocabulary is shared at the beginning of every lesson
- Success criteria is compiled with the class before independent activities and referred to through out the lesson

Equal Opportunities/Inclusion

- Maths lessons are differentiated up to three ways if appropriate.
- Wave 2 and wave 3 programmes are delivered to small groups where required.
- Gifted and Talented Pupils regularly work from a LO that widens their understanding and provides them with a wider breath of knowledge.

Resources

All pupils are supplied with a pencil and a ruler for every lesson. They are encouraged to write in pencil, rub out mistakes and use a ruler for any lines. All pupils are required to present their work neatly and appropriately for the task. Class rooms are well resourced and shared resources are stored centrally for all classes to use. Resources are displayed in the classroom interactively so that pupils can be independent in choosing a resource to help them.

Monitoring

- Scrutiny of planning and pupils books takes place termly. Feedback is given to SLT and teachers and actions are monitored closely by SLT or SL.
- Teachers have a maths lesson observed by a member of SLT each year.
- Pupils Progress meetings are scheduled termly where three target pupils are discussed in detail and the assessment evidence is moderated.
- Provision maps and IEPs are reviewed and updated termly to ensure pupils are achieving targets and have appropriate intervention.

Reporting to parents

Teachers meet with parents three times a year to discuss pupil's success and targets for achievement. Teachers complete a report at the end of the year to communicate achievements.

Glossary of Maths Teaching Terms

- 3MI – 3 minute improver. Children are asked to complete a 3 minute challenge linked the learning objective to further their understanding or consolidate learning.
- MOS – Mental Oral Starter – short starter activity at the beginning of each lesson to assess, consolidate and practise previous learning.
- L.O - Learning Objective
- S.C – Success Criteria
- S.A – Self Assessment
- SLT – Senior Leadership Team
- SL – Subject Leader
- QTL – Quality Teaching and Learning
- G+T – Gifted and Talented children
- SEND – Special Educational Needs and Disabilities
- IEP's – Individual Education Plan
- EYFS – Early Years and the Foundation Stage
- KS1 – Key Stage 1
- KS2 – Key Stage 2

Links to other Policies

QTL
Inclusion
Marking
G+T
SEN
Homework