



Pencoys Primary School

PENCOYS PRIMARY SCHOOL Mathematics Policy Review November 2018

The National Curriculum 2014 states 'a high-quality mathematics education 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.'

AIMS

The following statements have been taken from the National Curriculum which is statutory for all local authority maintained schools.

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.

Teaching and Learning

At Pencoys Primary School we use a variety of teaching and learning styles to suit all learners. Our principal aim is to develop children's knowledge, skills and understanding. A rich variety of activities are used which incorporate technology and the outdoor environment. Classrooms and learning spaces are number rich and children are encouraged to access and make use of the resources available to them within their environment. We value whole class and collaborative activities where children have the opportunity to become independent learners through problem solving activities.

Planning

As a core subject, teachers use the National Curriculum 2014 document as the basis for implementing the statutory requirements of the programme of study for Mathematics. In their planning, teachers ensure the needs of all learners' are met through appropriately differentiated activities and opportunities independent investigations are identified. Teaching

staff have agreed to adopt 'Abacus Maths' medium and short term plans for maths. These are adapted using teacher's own professional judgement.

Differentiation

At our school we teach Mathematics to all children, whatever their ability and individual intervention is used where appropriate to meet specific additional needs for example those with special gifts and talents, those with disabilities and those with English as an additional language.

Contribution of Mathematics to teaching in other curriculum areas

The skills that children develop in Mathematics are linked to, and applied in other subjects for example: in science when collecting and recording data; cooking when measuring ingredients and in geography when reading coordinates.

The Early Years Foundation Stage

We teach mathematics in our F2 class. As the class is part of the Foundation Stage of the National Curriculum, we relate the mathematical aspects of the children's work to the objectives set out in the Development Matters and the Early Learning Goals, which underpin the curriculum planning for children aged from birth to five. We give all the children ample opportunity to develop their understanding of number, measurement, pattern, shape and space, through varied activities that allow them to enjoy, explore, practise and talk confidently about mathematics. We encourage children to think in a mathematical way in order for them to solve mathematical problems.

Assessment for Learning

Teachers assess children's progress and attainment by using:

- Termly assessments
- daily formative assessments of mathematical activities and problem solving sessions which may be recorded in note form
- child-speak targets, which KS2 children self-assess as well as the teacher
- National Statutory Assessment Tests (SATs) at the end of years 2 and 6
- Moderation of maths samples is done in staff meetings and cluster groups to ensure teacher's judgements are accurate
- Informative marking using challenge questions and addressing misconceptions

Monitoring and review

Monitoring of the standards of children's work and the quality of teaching in Mathematics is the responsibility of all teachers and the Head teacher. The work of the subject leader in training, Mr Buck, also involves supporting colleagues in their teaching, being informed about current developments in the subject, and providing a strategic lead and direction for Mathematics in the school; as he is 'in training' he is supported and guided by the head

teacher at all times. The subject leader and the Head teacher evaluate the strengths and weaknesses in the subject, and indicate areas for further improvement. The leader has allocated management time to undertake lesson observations of Mathematics teaching across the school and our work is monitored by the scrutiny of performance data, marking moderation and the Vision Action Plan for Mathematics.

This policy will be reviewed at least every two years.

Signed:

Date:

Review