



Flakefleet Primary School

Mathematics Policy

Policy Aims

At Flakefleet Primary School we aim to provide a rich, challenging and child centred curriculum where there is a consistency of approach, standards and expectations. We want to develop enthusiastic, successful learners who enjoy mathematics, make progress and achieve well. We want children to have a breadth of knowledge, a depth of understanding and mastery of the concepts covered.

Our objectives in the teaching of mathematics are:

To promote enjoyment of learning through practical activity, exploration and reasoning;

To promote confidence and fluency with numbers and the number system;

To develop the ability to solve problems through decision-making and reasoning in a range of contexts.

Teaching and Learning

During the children's time in our school we aim to develop the content of The Primary National Curriculum, enabling all children to achieve the highest standards possible in mathematics and benefit from a broad, rich and personalised curriculum.

The acquisition of basic mathematical skills is vital to the life opportunities and achievement of our children. In all classes, children have a wide range of mathematical abilities. We recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this through a range of strategies – in some lessons through differentiated group work and in other lessons by organising the children to work in pairs on open-ended problems or games. We use classroom assistants to support children and to ensure that work is matched to the needs of individuals. We ensure that concepts are taught with the aid of practical, concrete resources, which then move to an abstract approach when the depth of understanding is sufficient. Multiple representations are used in order to develop conceptual understanding.

With regard to the teaching of Calculations please refer to the Calculation Policy.

Curriculum Planning

Mathematics is a core subject in the National Curriculum and we use the Lancashire Planning Disc for Maths as the basis for implementing the statutory requirements of the programmes of study for mathematics and to ensure that all objectives are covered.

The class teacher completes weekly plans for the teaching of mathematics. These weekly plans list the specific learning objectives, success criteria and expected outcomes for each lesson and give details of how the lessons are to be taught.

We plan the activities in mathematics so that they build on the children's prior learning. We give children of all abilities the opportunity to develop their skills, knowledge and understanding by providing differentiation and challenge for all ability groups in each part all parts of the daily maths lesson. We develop conceptual understanding through teaching multiple representations of skills. Many lessons will have practical elements, allowing children to work with concrete resources before dealing with abstract concepts.

Use of ICT

Information and Communication Technology enhances the teaching of mathematics significantly because ICT is particularly useful for mathematical tasks. It also offers ways of impacting on learning that are not possible with conventional methods. Teachers can use software to present information visually, dynamically and interactively so that children understand concepts more quickly. Pupils have access to iMacs, iPads (now 1:1 in year 2-6) and iPods to enhance their learning. Pupils use these to develop their skills and knowledge in all areas of the Mathematics curriculum (see ICT policy) and have opportunities to complete and record practical activities. We also have a variety of apps appropriate to the maths curriculum, which have been used extensively throughout school. The white wall provides excellent support for teaching and learning programs and is a medium for many aspects of the lesson, including planning and expressing ideas.

Foundation Stage

We teach Maths in Foundation Stage as an integral part of the topic work covered during the year. We relate the Maths element of the children's work to the objectives set out in the Early Year's Foundation Stage curriculum (EYFS) which underpin the curriculum planning for children from birth to age of five. Maths makes a significant contribution to the EYFS objectives of developing Problem Solving, Reasoning and Numeracy and shape, space and measure.

Cross Curricular

Where possible mathematical skills are developed in other subject areas and links are

highlighted in plans. The skills that children develop in Mathematics are linked to, and applied in, every subject within our Creative Curriculum. For example: measuring in Science and Design and Technology; using properties of shape in Art; collecting and presenting data in History and Geography and position and direction in Computing.

SEND

We enable pupils to have access to the full range of activities involved in learning Maths. If progress falls significantly outside the expected range the child may be identified as having special educational needs. Our assessment process examines a range of factors – classroom organisation, teaching materials, teaching style and differentiation – so that we can take some additional or different action to enable the child to learn more effectively. An individual IEP ensures that our teaching is matched to the child's needs with specific 'small step' learning objectives, which are reviewed half termly.

Assessment

We assess children's work in Maths by making informal judgments as we observe them during each Maths lesson. On completion of a piece of work the teacher marks the work and comments as necessary to facilitate next steps learning. During the unit of work pupils are encouraged to self or peer assess their learning.

Each half term, teachers assess each child. If progress is identified as being a cause for concern, an Intervention programme is put in place to secure accelerated learning, which is reviewed prior to the next assessment.

Resources

Resources for mathematics are updated annually, according to need. All classrooms have a limited supply of basic mathematical resources. Number lines, charts, etc. are encouraged to be displayed in classrooms at all times. There is a central resource area where larger equipment to support the teaching of Maths can be found, particularly for shape, space and measure. Resources for KS1 (for the number system) are stored in individual classrooms and have been reviewed and updated (Dec 2014).

Monitoring and Review

The SLT currently gain an overview of standards by regularly monitoring pupils' work across the age ranges. Currently teachers have a Mathematics lesson observed by the SLT at least once per year. Feedback, with developmental advice, is provided by the observer and is placed on the School's Network. This observation also feeds into the school's Appraisal Policy to ensure statutory standards are being met.

Pupil discussions ask a sample of pupils from each Year Group about the work they have been doing, strengths and areas to develop and the level they are currently working on. The SLT monitors levels in Mathematics throughout the year, to ensure levels of attainment and achievement are consistent throughout the school, and meet (and surpass) national expectations. Results of monitoring exercises are evaluated to feed into the subjects School Action Plan

Staff Development

Staff keep abreast of local/national initiatives to enhance learning. The Subject Leader identifies training needs through the results of the annual Appraisal Cycle including Lesson Observation feedback. Training is also planned as a response to new local and/ or National initiatives. Much of the focus of staff development in the coming year will be to familiarise staff with the new planning tool and to support teachers in assessing without levels.

Related documentation:

Learning and Teaching Policy

Assessment Policy

Special Educational Needs Policy

Planning Documentation

Monitoring and Evaluation Policy

Appraisal Policy

ICT Policy