Maths Policy

Review Date: Sept 25
Next Review Date: Sept 26

Introduction

This policy outlines what we are aiming to achieve in respect of pupils' mathematical education. It also describes our agreed approach to the planning, delivery and assessment of the mathematics curriculum. The mathematics taught and the methods used reflect the recommendations outlined in the new National Curriculum for mathematics and the EYFS guidance.

Aims

Mathematics helps children to make sense of the world around them through developing their ability to calculate, to reason and to solve problems. It enables children to understand and appreciate relationships and pattern in both number and space in their everyday lives. Through their growing knowledge and understanding, children learn to appreciate the contribution made by many cultures to the development and application of mathematics.

At Uplands Primary School we aim to:

1. Develop a positive attitude to maths as an interesting and engaging subject in which all children gain some success and pleasure;
2. Develop mathematical understanding through systematic direct teaching of appropriate learning objectives;
3. Encourage the effective use of maths as a tool in a wide range of activities within school and, subsequently, adult life;
4. Develop an ability in the children to express themselves fluently, to talk about the subject with assurance, using correct mathematical language and vocabulary
5. Develop an appreciation of relationships within maths;
6. Develop ability to think clearly and logically with independence of thought and flexibility of mind;
7. Develop an appreciation of the creative aspects of maths and awareness of its aesthetic appeal;
8. Develop mathematical skills and knowledge and quick recall of basic facts.

Mathematics Curriculum Planning and teaching

Mathematics is a core subject in the National Curriculum, and we carry out curriculum planning in mathematics in line with the structures and recommendations outlined in the National Curriculum.

We carry out curriculum planning in mathematics using the Can Do Maths Club approach. This includes a year roadmap and termly/unit roadmaps. Week by week planning is split into small manageable steps.

Daily 40-minute maths lessons consist of:

1. The hook – introduce the maths and asking 'what do you notice?' so the learning can be revealed to the children
2. Teach it: Live modelling of the new learning with the explicit use of variation theory to allow children to see the learning in different contexts and to deepen their learning. Supported with the use of concrete, pictorial and abstract resources. Introduce the STEM sentence of the lesson.

3. Practise it – I do, we do, you do approach to whole class practise.
4. Do it: Focussing on procedural fluency. What is it? What is it also?
5. Secure it: Focussing on conceptual understanding. Misunderstandings and what have they done wrong, true or false, spot the mistake.
6. Deepen it/Prove it: Applying understanding in solving a new problem. This is an opportunity to bring in prior learning with the new concept.
7. Review it: Recap the STEM sentence and Key Vocabulary of the lesson.

Maths on Track (MoT) 20-mintue sessions are designed to recap prior learning. To practice key arithmetic skills and times table knowledge.

Groups in maths are entirely flexible and children move on at their own pace; although small group intervention may emerge as the objective is taught. Feedback and marking informs where the children begin the next lesson and how much support or challenge they need to progress.

The headteacher, deputy head and mathematics subject leader for KS2/Early Maths Lead are responsible for monitoring the mathematics planning within school.

The Foundation Stage

Work undertaken within the Foundation Stage is guided by the requirements and recommendations set out in the Early Years Foundation Stage document.
We give all the children ample opportunity to develop their understanding of problem solving, reasoning and numeracy. We aim to do this through varied activities that allow them to use, enjoy, explore, practise and talk confidently about mathematics. There is a balance between adult directed and child initiated learning, with opportunities for children to develop their mathematical skills both inside the classroom and in the outside area.

Inclusion, SEN Provision

We teach mathematics to all children, whatever their ability. It is part of the school curriculum policy to provide a broad and balanced education to all children. We provide learning opportunities that are matched to the needs of the children with learning difficulties. Work in mathematics takes into account the targets set for individual supported targeted children, ensuring that they gain extra support to understand the concepts being taught.

Resources

There are a range of resources to support the teaching of mathematics across the school. All classrooms have a wide range of appropriate small apparatus/manipulatives. Calculators and a range of audio visual aids are available from the classroom and departmental storage areas if required. A range of software is available to support mathematics work on the computer.

Monitoring and Review

Monitoring the standards of children's work and of quality of teaching in mathematics is the responsibility of the Headteacher, deputy head and link Governor supported by the subject leader.

The work of the subject leader also involves supporting colleagues in the teaching of mathematics, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school.

A named member of the school's governing body is responsible for monitoring the implementation of mathematics action plan across the school. This Governor meets regularly with the mathematics subject leader to review progress.

Assessment

Assessment will take the form of formative and summative assessment. These assessments will be used to inform teaching in a continuous cycle of planning, teaching and assessment.

Formative assessments are used every day, in every lesson, to help teachers teach and children learn. Assessment For Learning will be an integral part of every lesson. The teacher will share the objectives for the lesson with the children and make sure that they are clear about what is expected of them to successfully achieve the objective. This is an essential part of assessment for learning process and helps the children take ownership of their own learning. The short-term assessment will also involve the teacher checking the children's understanding at appropriate times during maths sessions to inform future planning and teaching.

Our summative assessment of children's progress is completed at the end of each term using the 'Can Do Maths' 'Remember Its'. This then informs the next term's Close the Gaps and MoT maths sessions.