

Maths Implementation

Our School Curriculum

In our school we will follow the White Rose Hub scheme of work to ensure we have full coverage of the 2014 National Curriculum.

We will supplement our planning and resources using NCETM materials, Classroom Secrets, nRich and I See Reasoning to provide problem solving and reasoning opportunities. In Key Stage 1, there will be daily math sessions that last approximately 1 hour. We will also provide extra sessions lasting 10 minutes at least 3 times a week to specifically develop number fluency and recall within the children's learning.

The children will have the opportunity to use 'Number Bots' to practice number bonds as well quick recall of addition and subtraction facts. The guiding principle of this is to use it little and often. The children will have access to this during morning work and in their continuous provision. From Year 2 children will also use Times Tables Rock stars to develop their times tables recall. They will have access to both of these resources at school and at home via an app.

A typical maths lesson at Poplar Farm may begin by activating prior knowledge that children may need to access from their long-term memory to help them to learn the new concept of the day. The lesson will then progress through a number of small steps to develop understanding of what is being taught. These small steps may introduce the concept using a range of representations, may use conceptual and procedural variation to explore the concept further and will encourage the children to respond in complete sentences using the correct mathematical vocabulary. As we believe that all children can achieve in maths you will not see 'typical differentiation'. Instead, you will see support mechanisms put in place to ensure all children can access the lesson and that challenges are put in place to ensure children can deepen their understanding.

Wherever possible, we provide meaningful contexts and encourage the children to apply their learning to everyday situations. Although mathematics is best taught discretely, it has many cross-curricular links. Teachers need to use opportunities in other subjects to rehearse skills in a context. Mathematics involves developing confidence and competence in number work, geometry, measures and statistics and the using and applying of these skills.

The curriculum is delivered by class teachers. Children are taught in class groups from Foundation Stage upwards. In all classes, children are taught in a variety of groupings (whole class, groups, pairs, one to one) relevant to the objective being taught. Where appropriate groups/individual children are supported by teaching assistants. In line with the new curriculum, the school is using a mastery approach to teaching which has been customised to meet the needs of our children. Staff are kept up to date on current thinking, new teaching methodologies and ideas by the



subject leader through staff meetings and inset. CPD will be available where possible for staff who need to improve their understanding of the requirements of the new national curriculum, new methodologies and assessment/testing arrangements.

All classrooms will have a display area specifically for mathematics. This is called a working wall and will display items that children need to support and develop the unit's learning. For example, key vocabulary, success criteria, models, key questions. In the Early Years' Foundation Stage there are also specific mathematical areas for children to access in their everyday learning.

Early Years Foundation Stage (EYFS)

EYFS Practitioners also use White Rose Hub to ensure coverage of the EYFS curriculum. They also use NCETM 'Number block' resources to support the teaching and learning in their classrooms. Teachers and practitioners support children in developing their understanding of mathematics in a broad range of contexts in which they can explore, enjoy, learn, practise and talk about their developing understanding. This area of development includes seeking patterns, making connections, recognising relationships, working with numbers, shapes and measures, and counting, sorting and matching. Children use their knowledge and skills in these areas to solve problems, generate new questions and make connections across other areas of learning and development.

Children in the EYFS learn by playing and exploring, being active, and through creative and critical thinking which takes place both indoors and outside. We recognise that children learn through routine, continuous provision and incidental learning opportunities, as well as planned sessions and activities. Mathematical understanding can be developed through stories, songs, games, routine, questioning, imaginative play, child-initiated learning and structured teaching.

Assessment

At Poplar Farm we will assess mathematics by completing maths questions based on 3 previously taught objectives each week. One question will be something that was recently taught. The second question will assess understanding of an objective from a previous term and the other will assess knowledge from the previous year on a topic that is about to be taught. The answers children give to these will inform planning for the future and assess their understanding. We will track their progress across the year by highlighting objectives that they consistently achieve from the national curriculum.

As well as this, teaching and support staff also judge the success of each individual lesson. Where it is believed that children have not developed a deep understanding of a concept, these children will have the opportunity to work with a small group to address any misconceptions at a later point in the day. Where no children are identified for a master class, pre-teach sessions can be delivered to small groups of children where a concept is introduced to them in preparation for the next session.

Other evidence will include photographs of their practical activities, work in exercise books, marking and notes on planning. Children are given feedback verbally and written in books in line with the marking policy.