

Mathematics Policy

Reviewed: November 2024 Next review: November 2024

Signed	(Chair of Governors
Signed	(Head teacher)

Our Aims

At Manor Park we provide an imaginative and stimulating mathematics curriculum which is designed to match the full range of pupils' needs and interests.

We believe that children should have 'real' reasons for using maths; consequently, we link as many parts of the curriculum as possible to our math's teaching. This provides the children with a real context and challenge. In addition, we teach and practice the basic skills with rigor while applying them creatively.

We provide problem solving and investigative activities which consolidate and broaden the key basic skills. Well planned lessons ensure children become increasingly adept at solving problems and explaining their thinking and working. Wherever possible, children are encouraged to use ICT to broaden their understanding.

Curriculum Provision

Our curriculum incorporates the coverage of the statutory outcomes outlined in the Early Years Foundation Stage and KS1 Mathematics Programme of Study – National Curriculum 2014. Our planning is based on the White Rose Maths Schemes of Learning to guarantee consistency, coherence and progression throughout the EYFS and KS1. In addition, staff refer to other materials to support short-term planning. These are used across EYFS and KS1 allowing children to be exposed to a variety of different types of learning and problems to solve. Teachers implement our schools' agreed Calculation Policy. To learn mathematics effectively, some things have to be learned before others and this order of small step learning is factored into our planning (e.g. place value needs to be understood before working with addition). At Manor Park Infant and Nursery School, we have an emphasis on number skills first, carefully ordered, throughout the curriculum. Our pupils engage and enjoy using concrete resources to experiment and complete practical activities. Our pupils also use pictorial representations. These representations can then be used to help reason and solve problems. Using both concrete and pictorial representations enables the children to understand abstract methods.

Children take part in explicit daily mathematics lessons with a specific focus on either Number or Measure, Geometry or Statistics. All areas of the mathematics curriculum are continually revisited through planned short or longer in-depth teaching sequences to enable children to develop a depth of understanding. At Manor Park Infant and Nursery School, we regularly give our children opportunities to use and apply their mathematical learning in everyday situations, aiming to embed mathematical skills across the curriculum.

Teaching and Learning

Teachers alter and adapt their teaching styles to engage and motivate the children in their classes accordingly. Teachers are aware of different learning styles and use kinaesthetic, auditory and visual techniques to stimulate and help the children learn in their class.

Feedback

Feedback is given regularly within lessons. This feedback is usually verbal and is given in direct consequence to assessment for learning during the lesson. Once a week children are set a task in their 'Golden' maths books. This is an opportunity for the children to demonstrate a newly required skill. Children are encouraged to correct any mistakes that they may have made using a purple pen. This is known as a 'purple polisher'.

Learning Environments

Teachers are responsible for the learning environments in their own classrooms.

Teachers organise and construct role play opportunities ('pop-up' shop etc), use visual displays and open ended desktop activities to stimulate, motivate and deepen understanding.

The outside environment (whether in school or locally in the community) is used to enrich maths experiences, consolidate learning and give the children a real life context.

Learning walls are used to support mathematical thinking.

In the Foundation Stage and in Key Stage 1, the medium term plan is set out by the Whiterose Framework. The framework ensures continuity and progression through the development matters and the maths national curriculum. Areas are revisited regularly and are also taught through daily mental and oral activities.

The Whiterose framework gives more attention to fluency in maths as well as mastery, reasoning and problem solving.

Assessment for Learning

Questioning

A combination of open and some closed questions are used to probe and check understanding.

Formative Assessment

To enable highly effective teaching, teachers can choose to use pre and post learning challenges to check children's understanding and misconceptions. These learning challenges can be produced in a written form (especially in KS1) or simply in terms of structured task and questions to probe understanding. These learning challenges enable teachers to plan for new learning experiences and/or consolidation sessions. Teachers are encouraged to be flexible with their groupings reflecting children's strengths and weaknesses. Differentiation at Manor Park is a must with a real focus on high attainers. Effective assessment for learning enables teachers to see gaps in children's understanding and plan for learning experiences accordingly.

Formative assessment is carried out by all teachers regularly.

Teachers mark regularly and are advised to tick for correct answers and dot for incorrect answers. After the dot a line or box is drawn to encourage the child to look back at their work and alter incorrect answers. Annotations and/or comments are encouraged with positive comments and areas for improvement or next steps noted on work. For a more detailed account of marking and feedback, see appendix item 1.

Summative Assessment

In Key Stage 1 summative assessment is carried out three times a year using the testing materials in the Whiterose framework. In the Foundation Stage, children are assessed via the EYFS profile on a daily basis.

Calculation Methods

We use the methods in appendix item 2 to teach the various areas in maths.

Homework

We set maths homework weekly. Maths homework is set on a Friday and the children are asked to complete the homework by the following Thursday.

Involvement of Parents

At Manor Park we often inform the parents before we cover a maths topic. This provides parents with an opportunity to work with their children and give them experiences in advance of classroom learning. This gives the children increasing confidence in maths tasks within the classroom.

Resources

In EYFS and Key stage 1, maths resources can be found in individual classrooms and in the cupboards on the stage and along the KS1 corridor. Resources are ordered yearly by the maths coordinator. Teachers who require extra maths resources should discuss their needs with the maths coordinator who will order any additional resources. Teachers regularly make and laminate their own resources for use in the classroom.

This maths policy was compiled by Manor Park staff and written by the maths coordinator.

Written by: Tim Fennell Date: November 2024 Review: November 2024