



Maths At Woodfield



Intent:

At Woodfield Primary and Nursery School, we are passionate about our children learning basic mathematical skills, as well as developing the ability to reason and problem solve as they are important to everyday life – both now and in the future. We aim for our children to be enthusiastic about their maths lessons, developing positive attitudes towards mathematics in order to foster self-confidence and a sense of achievement. This is taught through a rich, progressive and sequential maths curriculum which gives all of our pupils, the knowledge, experiences and 'cultural capital' necessary to become educated citizens and to succeed in life. We aim to provide high quality mathematical learning experiences in order to develop children's mathematical skills and understanding and develop the children's abilities to use maths in the 'real world'. We do this at a minimum by covering the aims of the National Curriculum for maths, which 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.

Implementation:

At Woodfield Primary and Nursery School, we believe that all children can be successful in the study of mathematics. In order to achieve mastery, our expectation is that through quality first teaching, all our children will successfully access the learning. We expect the vast majority of pupils to move through the programmes of study at broadly the same pace. However, for children who lack fluency, we provide opportunities to consolidate their understanding through additional scaffolding (this could be through adult support, concrete resources or adapted work).

We understand the importance of basic skills in maths and emphasise the need for the children to be confident solving calculation questions and to be able to use known facts to solve questions effectively. As well as this, we believe that it is extremely important that all children are taught explicitly how to reason with mathematics and solve reasoning questions.

Implementation:

From Early Years through to Year 6, children are taught explicit skills that they will be expected to use. Teachers will model to the children how to use their oracy skills to help them to develop their ability to reason and sentence stems will be modelled to help the children to answer questions.

At Woodfield, we use a range of documents to support planning. For the long-term plans, we use the White Rose Overviews and Schemes of Learning - this ensures that the National Curriculum is covered across the year and where the objectives will be taught is clear. In order to avoid overload and to support the children's retention and recall, each year group has taken the White Rose Schemes of Learning and mapped them out over the year, so each maths topic is 'spaced' meaning the children visit topics more frequently. These medium-term plans have then been checked by the Maths LAT Lead to ensure progression and small steps through the year. Short term planning will be in the form of flip charts which follow our school's standardised proforma.

To ensure that the children are appropriately challenged, teachers create a range of questions using a range of contexts. These will include fluency challenges, reasoning questions, problem solving questions and 'Dive Deeper' challenges presented to children in different ways to demonstrate their understanding. Each child's needs will be carefully thought about and scaffolds will be put in place to ensure that the quality first teaching is accessible to all.

Times tables will be practised regularly in the classrooms and for homework from year 2 upwards. All children from Year 2 have a Times Tables Rockstars account for use at home and within school. The aim is for all pupils to be confident with all the times table facts by the end of year 4. Children in the younger years have access to Numbots both within school and for home learning. This is used to help them practise the 20 key skills through playing fun games.

Children in the Early Years experience practical mathematics daily through the environment which supports the continuous provision both inside and outside. The number areas and water/sand areas outside support the children's mathematical language development, therefore, children playing outside are often immersed in mathematical play. Alongside this, number songs are an integral part of maths in the Early Years, building children's repertoire through high engagement. This provision is complemented with adult directed maths sessions which build on children's knowledge and skills across all aspects of maths: number; numerical patterns and shape, space and measure. Children have endless opportunities to practise, revisit and consolidate skills and develop their mathematical interests. Careful observation and assessment are used to inform future planning.

Impact:

Children across the school have positive attitudes towards their learning in maths and make good progress; they enjoy maths lessons and become confident and successful learners who can achieve regardless of their starting points. Teachers will use a range of formative and summative assessment in maths to assess the children's understanding and what they need to do next. During the lesson, through live marking, questioning and tasks, teachers will check that the children have understood the concept and can apply it to different question types. The teachers and teaching assistants will assess the pupils' achievements against the 'Can I'.

Throughout the year, teachers will revisit concepts they have already covered using the 'Flashback' materials from White Rose, which will support the children's retrieval skills. The children will practise key skills and concepts through different topics and at the end of each term, the children will complete NFER testing (years 1, 3, 4 and 5) and practise SATs style assessments in year 2 and 6. These test results, along with the work and assessment from the term, will inform teacher assessment against the National Curriculum objectives.