



## Manor Farm Infant School - Curriculum Design for Maths

### Maths INTENT

At Manor Farm Infant school, we strive to ensure that the children in our care leave our school with high standards of numeracy, encouraging all pupils to work to the best of their ability.

Our intention is to ensure a depth of conceptual understanding through maths fluency, problem solving and reasoning skills. The maths curriculum is planned and sequenced utilising small step progression through concepts as well as a concrete-pictorial-abstract approach.

With this in mind we endeavour to ensure that children develop a positive and enthusiastic attitude towards mathematics that will stay with them, by fostering analytical minds and confident communicators to tackle a range of practical tasks and real-life problems.

### Maths IMPLEMENTATION

Throughout the school we use the White Rose Maths scheme of learning as a basis to guide the children's journey to mathematical understanding. White Rose Maths is based on a mastery, small steps approach that gradually builds up to develop a deep understanding of the subject. It uses a concrete, pictorial and abstract approach to underpin understanding. Teachers use their expertise and knowledge to adapt and develop lessons to suit their cohorts needs.

### EYFS

Mathematics is one of the seven areas of learning within the Early Years Foundation Stage Curriculum and is subcategorised into the two strands, 'Number' and 'Numerical Patterns'. There is a focus on learning through play for children at this stage of their education. Therefore, practical, hands on mathematics activities are available in dedicated areas in both the inside and outside environments. These will be changed regularly, as topic areas change, to keep children engaged, and will allow children to explore concepts introduced in adult-led activities. Staff also provide learning opportunities through quality interactions with children and encourage the children to explain their reasoning using full sentences.

### Key Stage 1

Maths is taught daily using a wide range of mathematical resources and pupils are taught to show their workings in a concrete, pictorial and abstract form wherever suitable. They are taught to explain their choice of methods and develop their mathematical reasoning skills. Every lesson will include some practise of mental maths skills, usually as a starter, development of fluency skills and an opportunity to practise reasoning and problem-solving skills. Talking about Maths is an important part of every lesson as this helps children to develop speaking, listening and reasoning skills. Maths vocabulary is explicitly introduced and recapped on to ensure understanding. Children are encouraged to work together to solve problems. Teachers will use the White Rose Maths Flashback questions to revisit and revise topics previously covered.

## Maths IMPACT

As a result of our Maths teaching you will see:

- Engaged children who are all challenged
- Confident children who can talk about Maths and their learning and the links between Mathematical topics
- Children who show perseverance, resilience and a willingness to 'have a go'
- Lessons that use a variety of resources to support learning
- Different representations of mathematical concepts
- Learning that is tracked and monitored to ensure all children make good progress from their starting points

Children will:

- Have a greater understanding of number sense and be more secure using and applying number facts
- Be able to apply their knowledge to solve a range of concepts using a variety of methods
- Become more flexible and fluent thinkers as they are exposed to the relationships between idea and concepts
- Visualise and reason more readily due to a more in depth understanding of the key concepts
- Be confident using the correct mathematical language to compare, explain and problem solve.

## Meeting the needs of our disadvantaged children, including Children Looked After, those eligible for Pupil Premium funding and those with SEND.

- Pupils falling into the lowest 20% category make personal progress of which they are proud. Where necessary children receive structured targeted interventions in a small group situation. We embrace a no ceilings approach where all children access the same work and those that need it have support in accessing resources to allow them to understand how to solve problems and extend their learning. This provision enables their learning to be taken in small steps, modelled and scaffolded.