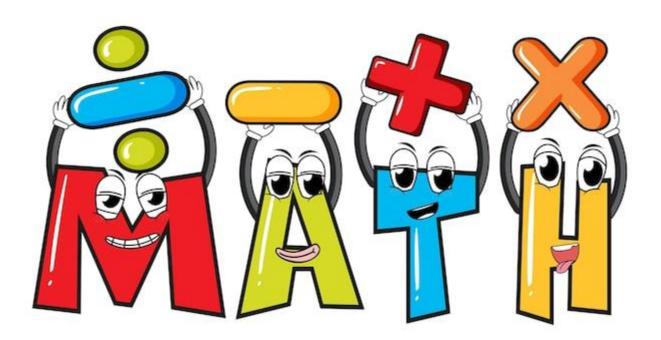
## Limitless Dreams, Endless Opportunities



# Maths Curriculum September 2022



Subject Leader: Lynette Thorley- Hackett

#### <u>Intent</u>

At Manor Park Primary School and Nursery, we believe mathematics is an important part of children's development throughout school, right from an early age. We embrace a Mastery Curriculum approach to our mathematic teaching. This means that as we work through the year group objectives with the children, we spend a greater amount of time going into depth in areas/ concepts. In line with the 2014 National Curriculum for maths, we aim to ensure all children become fluent in the fundamentals of mathematics, are able to reason mathematically and are able to solve problems through the application of their mathematical knowledge. These skills are embedded within Maths lessons and developed consistently over time. We are committed to ensuring that children are able to recognise the importance of Maths in the wider world and that they are also able to use their mathematical skills and knowledge confidently in their lives in a range of different contexts. We want all children to enjoy Mathematics and to experience success in the subject, with the ability to reason mathematically. We strive to ensure that the whole class moves through content at the same pace and when we scaffold, it is through depth rather than acceleration; everyone is given time to think deeply about the maths and we strive to develop a positive attitude in order to build self-confidence, resilience and a sense of achievement.

#### Implementation

The content and principles underpinning the 2014 Mathematics curriculum and the Maths curriculum at Manor Park reflect and reinforce an expectation that all children are capable of achieving high standards in Mathematics. The large majority of children progress through the curriculum content at the same pace. Scaffolding is achieved by emphasising deep knowledge and through individual support and intervention. Teaching is underpinned by methodical curriculum design and supported by carefully crafted lessons and resources to foster deep conceptual and procedural knowledge. Practice and consolidation play a central role. Carefully designed variation within this builds fluency and understanding of underlying mathematical concepts. Teachers use precise questioning in class to test conceptual and procedural knowledge and assess children regularly to identify those requiring intervention, so that all children keep up.

To ensure whole consistency and progression, the school uses the DfE approved 'Power Maths scheme from Reception through to Year 6. This is fully aligned with the White Rose Maths scheme and the school's ongoing engagement with the DFE funded Maths Hubs programme continues to ensure that staff at all levels understand the pedagogy of the approach. New concepts are shared within the context of an initial related problem; which children are able to discuss in partners. This initial problem-solving activity prompts discussion and reasoning, as well as promoting an awareness of maths in relatable real-life contexts that link to other areas of learning. In KS1 and KS2, these problems are almost always presented with objects (concrete manipulatives) for children to use. Teachers use careful questions to draw out children's discussions and their reasoning. The teachers then leads children through strategies for solving the problem, including those already discussed. Independent work provides the means for all children to develop their fluency further, before progressing to more complex related problems. Mathematical topics are taught in blocks, to enable the achievement of 'mastery' over time. Each lesson phase provides the means to achieve greater depth, with more able children being offered rich and sophisticated problems, as well as exploratory, investigative tasks, within the lesson as appropriate.

#### <u>Impact</u>

At Manor Park, we consistently deliver mathematics through the maths mastery approach across the school. The school has a supportive ethos and our approaches support the children in developing their collaborative and independent skills, as well as empathy and the need to recognise the achievement of others. Children who attend Manor Park, will make good or better progress from their own personal starting point. By the end of KS2 they will be able to fluently recall their times tables up to 12x; they will have a great understanding of place value; secure with the four operations; understand the relationship between fractions, decimals and percentages; use measurements effectively and accurately; understand how ratio and proportion can be used; solve algebraic problems; have a good understanding of geometry and be able to analyse statistics.

### <u>KS2</u>

82% of children achieved the expected standard compared to the national average of 71%.

26% of children achieved the greater depth standard compared to the national average of 22%.

The impact of our teaching of mathematics, is measured through a variety of methods such as: summative and formative assessments each term, pupil voice, lesson observations, learning walks, questioning and marking of books.