

### Our Vision:

**“At St Mary’s, all children will become resilient, fluent mathematicians with an ability to tackle problem solving and take on maths in the real world.”**

### Our key principles:

- All children can learn to do maths
- Fluency, Reasoning and problem solving are embedded within each of our units across all year groups
- Children are supported in their understanding through the use of concrete, pictorial and abstract

### Intent

At St Mary’s, we value a maths curriculum that is creative and engaging where all children can access the curriculum and make progress in lessons. We want all pupils at St Mary’s to experience the beauty, power and enjoyment of mathematics and develop a sense of curiosity about the subject with a clear understanding. Our children need to develop the necessary skills to make them “deep thinkers” acquiring maths and mental maths skills that can be recalled quickly and transferred and applied in different contexts. They need to be able to make rich connections across the areas of maths and use their knowledge in other subjects. Maths is the foundation for understanding the world and we want our children to know the purpose behind their learning and to apply their knowledge to their everyday lives.

### Implementation

The content and principles underpinning the maths curriculum at St Mary’s reflect those found in high-performing education systems internationally.

These principles and features characterise this approach and convey how our curriculum is implemented:

- Teachers 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
- Differentiation is achieved by emphasising deep knowledge and through individual support, resources and intervention
- Teaching is underpinned by methodical curriculum design and supported by carefully crafted lessons taught in small steps 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
- Each lesson starts with retrieval of previously learnt skills, from earlier topics, lessons and even year groups
- 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
- Teachers have a high expectation for vocabulary used when discussing mathematical concepts and when explaining reasoning for answers. This is reflected in the children’s written work too
- Mental maths is discretely taught and underpins all maths lessons

To ensure consistency and progression, St Mary’s uses the DfE approved White Rose Maths scheme throughout school. White Rose premium resources and NCETM spine materials are used to support planning and resources. Our ongoing engagement with the DfE funded Maths Hubs programme and Curriculum Leadership Group continues to ensure

that staff at all levels understand the pedagogy of the approach. All staff are kept up to date with new concepts and ideas. 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.

### **Specific groups of children:**

- All pupil premium children will have a target which focuses on a skill that needs developing. Work will be provided to support the achievement of that target and time is given for the child to complete work set
- SEN children will predominantly be covering the curriculum content of their year group. Their learning will be supported through the use of models, scaffolds and practical apparatus. Specific targets are set which focus on a gap in their learning. Additional work will be set to support the child in meeting this target. Adults will support these children at points within their learning and their progress will be recorded on their IEPs and B squared forms
- 'Rapid graspers' are encouraged to explore their understanding at a greater depth through: open ended tasks, reasoning and problem solving and investigations

### **How we monitor our children's learning:**

- Marking and feedback within books and verbally during lessons
- Assessments 3 times a year using Testbase, White Rose, NFER and previous SATs papers
- Summative assessments using otrack
- Termly pupil progress meetings
- Learning walks and lesson observations
- Senior leaders monitoring of books
- Senior leaders looking at the data and identifying areas to develop
- Pupil interviews

### **Impact**

- Children are fluent in the fundamentals of mathematics with a conceptual understanding and the ability to recall and apply knowledge rapidly and accurately
- Children have the skills to solve problems by applying their mathematics to a variety of situations with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios
- Children will be able to reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language
- Children understand the relevance and purpose behind what they're learning
- Maths is fun and it is okay to be 'wrong' because the journey to finding an answer is most important
- All children experience challenge and success in mathematics by developing resilience and celebrate other's success
- High standards are maintained, with achievement at the end of KS2 well above the national average and a high proportion of children demonstrating greater depth, at the end of each phase