**St Mary’s RC Primary Maths Vision statement 2023-2024**

**Intent**

We want all children to love Mathematics and have appreciation of the power and wonder of maths, a core subject through which they can learn to solve problems and communicate their ideas. We endeavor to instill in all pupils the belief that all pupils can achieve in maths. We want to inspire all our children to be confident Mathematicians so that in the ‘real world’ they are able to access a wider range of opportunities developing skills essential for life. We use a mastery approach in the Mathematics curriculum to promote deep and sustainable learning where the development of both procedural and conceptual fluency is essential. We intend to do this through teaching Mathematics based on the White Rose maths scheme as well as the resources drawn from NCETM and NRICH.

**Implementation**

We structure our learning using the ‘White Rose’ scheme, a mastery approach to maths teaching, a research -driven teaching and learning method that meets the goals of the National Curriculum. We use this because it:

* Puts numbers first
* Puts depth before breadth
* Encourages collaboration
* Focuses on fluency, reasoning and problem solving

We use the Concrete Pictorial Abstract approach in maths, whereby children are introduced to a new concept, working with concrete physical resources and pictorial representations which leads to a better understanding of abstract concepts.

Mathematics is delivered in a daily discrete lesson structured by revisiting previous skills using retrieval practice, direct teaching and modelling of a new skill, guided and supported work and independent application (I do , we do, you do). Lessons are planned to enable children to develop their reasoning, fluency and problem solving skills with the use of a range of concrete, pictorial and abstract (CPA) models. Alongside this we promote Number Talk and exposure to a wide range of problems, through providing opportunities to use Mathematics in other areas of the curriculum with an emphasis on real life application. We promote the use of questioning to allow children to deepen and explore mathematical ideas, tailoring this questioning to the needs of all individual children. Live marking is used to clear up misconceptions on the spot. Classroom displays promote the application of a mastery approach with Working Walls, alongside permanent displays of number facts. Outside of the Mathematics lesson, retrieval practice tasks or quizzes are a daily occurrence together with Number Talk.

At St Mary’s we believe that all learners have potential to do well in maths and we help them get there by providing stretch and challenge in all lessons. Teachers aim to encourage all children to think in maths by giving them opportunities to solve problems in different ways, find a pattern, ask open-ended questions or ask them to prove their understanding in the form of a deepening task.

We use daily interventions to support struggling children in maths. They are scheduled either as a pre-teaching tool or as a follow-up intervention after a lesson. PiXL therapies are used with a target group, based on PiXL maths diagnostic assessments.

**Impact**

Children at St Mary's speak enthusiastically about maths. They strive to develop a

growth mindset in the subject and are not afraid of making mistakes or taking risks. Children aspire to look for efficient methods to solve problems together with communicating their ideas accurately and efficiently, both verbally and in written form, using previously taught ley vocabulary and key sentence stems. Teachers will assess impact daily through revisiting of previous skills and the use of focused assessment for learning questioning. This will be supported by children completing formal written tasks, such as White Rose end of block assessments, PiXL termly diagnostic assessments and end of year Key Stage assessments.

**Cross Curricular links**

Science: gathering and presenting data in a variety of graphs and charts, analysing statistics, measuring time and temperature

Geography: reading and analysing data presented in different ways, measuring and scales through map work

History: Early number systems (e.g. Roman Numerals), dates, ordering events, exploring ancient Greek mathematicians in History, such as the Pythagoras Theorem.

Computing: logical thinking, working systematically

Art: shape (including reflection, translation, repeated patterns), lines

Design and Technology: measure (length and weight), gathering and presenting data

Reading: the ability to read and understand a problem, identifying the key information

MFL: learning numbers in French, days of the weeks, months