

# Sherdley Primary School

## Our Intent, Implementation and Impact statement for Maths

### Maths Intent

At Sherdley Primary School, all staff believe that their pupils are mathematicians, and the children are encouraged to be resilient learners- prepared to take on mathematical challenges. Our pupils learn Fluency, Reasoning and Problem Solving skills through the Mastery approach. They are encouraged to 'prove' their Mathematical understanding using concrete manipulatives, pictorial representations, and abstract explanations. We aim for our pupils, from Reception upwards, to have a daily 'Mastering Number' or arithmetic session and mathematics lessons where they learn new skills and develop secure mathematical understanding. Mistakes and misconceptions are used as a valuable part of the pupils mathematical learning journey- which is taught in manageable small steps.

### Maths Implementation

The maths curriculum is led by an experienced subject leader who has completed the MAST training (Maths Specialist Teacher course) at Edge Hill University to develop their knowledge of how children develop their mathematical understanding. They have attended training with local partner schools and Mastery Maths Hub meetings to share information and have supported colleagues with CPD sessions as well as coaching and mentoring. The curriculum map, progression of skills and subject AREs are regularly reviewed to ensure teachers and children are striving to achieve age-related expectations.

Our maths teaching and learning follows a 'Mastery approach' using the White Rose scheme which informs the long-term planning, teaching and learning of mathematics at the school. The school utilises the concrete-pictorial approach to learning to ensure children use appropriate resources and gain a confident mathematical understanding of new concepts before moving on to teaching and learning abstract concepts. Opportunities for reasoning and problem solving are built into the children's learning journey to allow them to show their understanding in different ways.

Lessons are taught daily in the form of discrete maths lessons with additional arithmetic sessions to support number fluency and the learning of multiplication facts. Maths lessons begin with a 'hook' and move on to a range of mathematical variation questions which challenge the children's mathematical fluency, problem solving and reasoning skills. For children who understand a concept quicker, challenges are used to deepen their learning further within the taught concept.

Daily assessment is incorporated throughout the lesson through live and verbal feedback, as well as work marked by teaching staff using green highlighters for correct answers and yellow highlighters used for work which can be corrected with 'red responder' pen at the next available opportunity. Termly assessments are used as a diagnostic tool to ensure that teachers are adapting learning to meet the needs of all children and ensure that any necessary interventions are targeted specifically to meet the needs of the children. Times tables play an important part in our maths learning, with children developing their fluency and knowledge in rapid recall of tables up to 12x12 by the end of Year 4. While the rapid recall of times tables is being developed, children are also learning how to apply and manipulate their understanding of this to reason and solve problems.

### Maths Impact

Through book monitoring and pupil voice interviews with the children at Sherdley Primary School, the children openly enjoy maths, even though it is challenging. Maths lessons enable children to understand rather than just do, to develop a knowledge of mathematical skills and methods to be able to calculate and solve age-appropriate problems effectively. Children apply their calculation skills and understanding in other areas of the curriculum to become confident and resilient problem solvers with the ability to use mathematical vocabulary to reason, justify, articulate and explain their ideas mathematically. This is evidenced by the school's most recent end of KS2 Maths data, where 79% of children achieved the expected standard or better, which is in line with other local schools and the national average.