Mathematics

Lowe's Wong Anglican/ Methodist Junior School

INTENT – We aim to…

encourage children to have a love of maths and see it as an enjoyable subject.	foster a growth mindset so all children have a 'can do' attitude to maths lessons.	develop children's number sense, mathematical fluency, reasoning and problem solving.	delve into the mathematics so children have a deep, connected, and sustained understanding.	support and challenge all learners using an approach based in Teaching for Mastery.	ensure appropriate progression in content and mathematical language across the school.

IMPLEMENTATION – How do we achieve our aims?

PLANNING: At Lowe's Wong Junior school we use the White Rose Maths scheme to support a Teaching for Mastery approach to teaching and learning mathematics. Teaching for Mastery is an inclusive approach with an emphasis on representing concepts to promote a deep, conceptual understanding, promoting multiple methods of solving a problem and building self-confidence and resilience in pupils. Topics are studied in depth, and those pupils who grasp concepts quickly are challenged with rich and sophisticated problem-solving tasks. Those children who are not sufficiently fluent are provided with additional support, normally within their lessons, to consolidate their understanding before moving on. Further, we are introducing Fluency Bee in Year 3, and Mastering Number KS2 in Years 4, 5 and 6 to support children's mathematical fluency and knowledge of number facts.	RECORDING: At our school, maths is recorded in a variety of ways. We use the White Rose Maths Workbooks alongside our individual, A4 books with squares. Photographs are sometimes used to showcase the use of manipulatives to support a Concrete, Pictorial, Abstract approach. Our books tell the maths journey of each child and provide important evidence for assessment for learning. We have a maths working wall which we add to as we progress through a unit of work making links to previous learning.
ASSESSMENT: Progress over time is achieved through careful tracking and monitoring with reference to the White Rose Progression Map. Assessment in maths – formative or summative – is an important part of progress and attainment. We use the White Rose End of Term assessments to help inform our ongoing assessment for learning, as well as to help teachers report mid-year and end of year attainment grades. However, much of our assessment for learning happens at the point of teaching and learning through class discussion, teacher questioning or class work. This helps us identify next steps and gaps in learning. After each summative assessment point, we have progress meetings in year groups to create Assessment Action Plans, looking at gaps across the cohort and in specific groups. We discuss in depth how we will best support the children going forward and put plans in place to achieve this.	VOCABULARY: Developing the use of high quality, technical, accurate mathematical language is vital for progress and to foster deep discussion. Teachers will teach, use, and expect accurate language at all times. Children are encouraged and supported to use this shared maths language in whole class discussions, group and paired work. Their ability to articulate their understanding through explanation is a key assessment tool. We use the White Rose Schemes of Learning and Calculation Policies to ensure progression of language across the school.
WIDER OPPORTUNITIES: We encourage children to take their maths further by offering Spaghetti Maths Clubs through an external provider. We encourage children to see real life maths that is part of their everyday life and in other subjects. Our children apply their maths skills in Science and Geography, collecting and handling statistics and supports their understanding of chronology in their History lessons.	SEND: Teachers and TAs will be aware of individual targets and needs of their children, and ensure maths lessons are fun, progressive, and meaningful for each child. Our teachers will plan to remove barriers to learning for SEND children in their class so they can have full access to Maths lessons. Written evidence may differ for some children e.g. photos may be used to record work. We have invested in a wide range of manipulatives to support both calculation and conceptual understanding.

IMPACT – How do we know we have achieved our aims?

Children show a positive attitude to maths in lessons and during pupil interviews.	Children show a belief in their own mathematical abilities and display a 'can do' attitude and enjoy maths lessons.	Children learn number facts to automaticity and can apply these to reasoning and problem-solving tasks.	Lessons are rich in concrete manipulatives, pictorial representations, which lead to the abstract.	Maths books and assessments show progress for each child.	Children use high quality, accurate vocabulary appropriate for the task or discussion.

Let your Light Shine

Respect Honesty Kindness Thankfulness Forgiveness Perseverance