Overview of Maths at Sowe Valley Primary School

Vision (Intent)	Immersion (Our Offer)	Personalising the Curriculum to Sowe Valley (Implementation)
At Sowe Valley Primary School, we believe every child has the potential to excel in mathematics and develop a lifelong love for learning. Our vision is to nurture confident, resilient mathematicians who approach every problem with determination and a positive mindset. We see mistakes not as setbacks but as valuable opportunities to learn and grow, encouraging our pupils to embrace challenges as part of their journey. At Sowe Valley, we also encourage our pupils to be risk-takers, confidently tackling new and unfamiliar problems, knowing that even the most challenging tasks offer valuable learning opportunities. We want every child to feel that they ***belong*** as part of a supportive mathematical community, where they can share ideas, value one another's contributions, and grow together. We aim to build fluency in key mathematical concepts, enabling our pupils to confidently apply their skills in a variety of contexts. At Sowe Valley, we'd love to inspire students to explore, question, and discover the fascinating world of mathematics. By helping them to ***believe*** in their own abilities, we enable them to face challenges with courage and optimism. We aim to encourage our pupils to be reflective, taking time to evaluate their learning and understand how to further improve. We also emphasize the importance of oracy, supporting pupils to clearly communicate their mathematical thinking, share their reasoning, and deepen their understanding. Resourcefulness is encouraged, with pupils using different strategies and making connections between different areas of mathematics.	Current Practice: At Sowe Valley, mathematics is implemented with a clear focus on building strong foundations and ensuring fluency across all stages. In both Key Stage 1 and Key Stage 2, the White Rose scheme is used for daily lessons, where teachers' plans follow the scheme's carefully thought-out small steps. These are then adapted to meet the specific needs of each class. It is intended that all children (with the exception only of those with significant SEND) have the same starting points with opportunities for all to then extend learning. Throughout all stages of learning, resources are strategically used to support students' understanding. To develop early fluency in mathematical concepts in EYFS and KS1, the Mastering Number programme is used four times a week, helping children to build secure foundations for their future learning at Sowe Valley. To develop fluency in Key Stage 2, teachers routinely use the PAL resources. PAL (Practice and Learn) provides bespoke overlearning of key skills through fun, engaging and interactive activities. At Sowe Valley, it is delivered three times a week for approximately thirty minutes. Sessions provide opportunities to practice and become fluent in the fundamentals of number: to count, over-learn and rapidly recall number facts; to consolidate number	**Early Years / Reception** In Reception, children build strong foundations in early number through play, exploration and small-step adult-led learning. They develop a deep understanding of numbers to 10, including counting, subitising, comparing, ordering and early addition and subtraction. Alongside this, children explore spatial awareness, shape, pattern and measurement, embedding mathematical language and ideas in everyday contexts and continuous provision. **Year 1** In Year 1, children focus on understanding place value within 10 and 20, learning to count forwards and backwards, compare numbers and use these skills in simple addition and subtraction. As the year progresses, they explore place value up to 100 and begin to develop a secure understanding of number bonds. They are introduced to multiplication and division through grouping, sharing and counting in 2s, 5s and 10s. Pupils learn about halves and quarters in fractions, explore 2D and 3D shapes, and develop their understanding of measures, including length, height, mass, volume, money and time. **Year 2** In Year 2, children deepen their understanding of place value with larger numbers and extend their addition and subtraction strategies. They begin to use multiplication and division facts more fluently and apply these in simple problem-solving. Pupils explore money, length, height, mass, capacity and temperature, learning to use standard units of measurement. They build on their understanding of fractions, including unit and non-unit fractions, and learn to tell the time to the nearest five minutes. Towards the end of the year, they work with statistics by interpreting and constructing pictograms, tally charts and block diagrams, and continue to develop their understanding of position and direction. **Year 3** In Year 3, pupils develop their understanding of place value with three- and four-digit numbers, learning to compare and order them and use formal written methods for addition and subtraction. Multiplication and division are a key focus, with pupils learning times tables up to 8× and applying these in a range of contexts. They explore length and perimeter, mass and capacity, and deepen their understanding of fractions, including equivalence and adding fractions with the same denominator. Pupils also work with money and time, learn about angles and properties of 2D and 3D shapes, and begin to interpret and present data using bar charts and tables. **Year 4** In Year 4, children extend their understanding of place value to five-digit numbers, including rounding and estimating. They use formal written methods for all four operations and apply these skills to increasingly complex problems. Pupils work with fractions and decimals, including equivalence, addition and subtraction of fractions, and simple decimal notation. They learn to calculate area and perimeter, convert between different units of measure, and apply their knowledge to time and money problems. Work on geometry includes identifying angles, symmetry and properties of shapes, while statistics focuses on interpreting and presenting data effectively.

Learning walls and use of resources are carefully thought out so children have access to models and supports. *Above all, we strive to make mathematics an enjoyable and engaging subject—one that our pupils look forward to with enthusiasm and curiosity. Through these experiences, we support every child to* ***become*** *a confident, capable, and passionate learner, ready to apply their mathematical skills both in school and beyond.*	*skills and calculate efficiently and accurately.* *Additionally, all students have access to Times Tables Rock Stars (TTRS) at home, with daily practice encouraged. Termly tournaments are held to encourage healthy competition and enhance quick recall of multiplication tables.*	***Year 5*** *Year 5 pupils tackle larger numbers confidently, working with place value up to millions and applying efficient written methods for addition, subtraction, multiplication and division, including long multiplication. Their work on fractions becomes more sophisticated, including equivalence, converting between mixed numbers and improper fractions, and performing all four operations with fractions. They also develop their understanding of decimals and percentages and learn how these link to fractions. Pupils explore perimeter, area and volume, work with statistics such as line graphs, and study shape and properties in more depth, including position and direction. They also learn to convert between different metric and imperial units and work with negative numbers.* ***Year 6*** *In Year 6, pupils consolidate and extend their understanding across all areas of mathematics in preparation for secondary school. They work confidently with large numbers and negative numbers, applying all four operations to increasingly complex, multi-step problems. Their work on fractions includes simplifying, comparing, and performing all four operations, and they apply their knowledge to decimals and percentages with fluency. Pupils are introduced to ratio and algebra, exploring patterns, expressions and simple equations. They deepen their understanding of area, perimeter and volume, and interpret and construct a range of statistical representations, including pie charts and calculating the mean. Geometry and position work includes translations, reflections and working with nets of 3D shapes. The summer term focuses on applying their learning through themed projects and problem solving across multiple strands.*