

## St Stephen's CE RSA Academy

### Maths Rationale

#### **Intent**

At St Stephen's, our principal aim is to develop children's knowledge, skills and understanding in mathematics. We aim to provide a high-quality maths education that equips the children with a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics and a sense of enjoyment and curiosity. Mathematics is a creative and highly interconnected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology, and engineering, and necessary for financial literacy and most forms of employment. Therefore, it is important that we support our children to succeed in the world beyond school.

#### **Implementation**

At St Stephen's, Maths No Problem is used as a framework for planning to ensure consistency and progression throughout the school from Early Years and beyond. This places Maths in a real-life scenario and makes learning meaningful for the children. The framework is structured to set out progression in the 7 areas of disciplinary knowledge of the mathematics curriculum: Number and place value, addition and subtraction, multiplication and division, fractions, measurement, geometry and statistics. All of these are interwoven with the substantive knowledge and concepts of fluency, reasoning and problem solving. The framework is designed to inform how we plan for children to improve year by year and assess how well they are improving. Progression is a cumulative experience of using and applying disciplinary knowledge gained and made secure by repeated practice in different contexts. Learning is embedded by the application of what has previously been learned and remembered into new concepts.

At the heart of our curriculum design is the CPA (concrete, pictorial, abstract) approach. Children develop a secure depth of understanding through the use of concrete resources, pictorial representations of models and images, which then enables them to understand the abstract concepts. The curriculum adopts a spiral design with carefully built-up mathematical concepts and processes adapted from the Maths mastery approaches used in Singapore.

Oracy is fundamental to our maths curriculum with opportunities for reasoning and 'thinking like a mathematician'. Important vocabulary is taught and reinforced by speaking in full sentences, including the use of sentence stems.

We use the Trust Calculation Policy, developed in line with the National Curriculum, alongside Maths No Problem, which ensures a progressive introduction to age-appropriate strategies for calculating. At St Stephen's, we believe in providing children with regular opportunities to develop mathematical fluency and, in turn, confidence, using tools like morning maths or Mastering Number. This supports children to know more and remember more.

Regular and ongoing formative assessment is undertaken by teachers in the classroom in order to address misconceptions and misunderstandings. Teacher knowledge of individual pupils is supported by PiXL assessments throughout the year along with regular Maths No Problem reviews and tests. In this way, teachers are able to identify gaps in knowledge and take appropriate and timely steps to bridge these gaps, as well as providing subject and senior leaders with an insight into school performance against national trends.