



## Our Vision for Maths at St Matthew's CPS



### Covid19

*The first two weeks back in September 2021 will have a 'Basic Skills' Focus for both key stages. In line with DFE guidance, there will be an emphasis on Maths lessons and cross-curricular maths in other curriculum areas. The focus will be on key basic skills relevant for each year group.*

*Apparatus such as counters, dice etc. can still be used if appropriate, with staff ensuring that these are sanitised after every use.*

*As per current guidance, we will be sending home maths homework. Children will continue with their daily Maths lessons in school, as well as continuing to access the 'TTRockstars' app both in school and at home to develop essential multiplication skills.*

*In addition to the above, we will remain aware of the recovery curriculum that is in place for schools and follow this accordingly to meet the required expectations.*

*Interventions will be put in place for all year groups which will be delivered by qualified teachers to target closing the gaps.*

### Vision

The aim of this statement is to summarise the high standards of Mathematics expected at St. Matthew's CPS, based on the latest Maths Curriculum, the introduction of Singapore Maths and supported by our Maths Calculation Policy. This vision is shared with the parents of our pupils, and shared with our staff, who receive Continuous Professional Development (CPD) in all relevant areas.

### Intent

A child's ability to calculate; apply knowledge; to communicate fluently; to reason and to solve problems mathematically, forms the backbone of their education for life. As our children implement their mathematical skills, they should be able to identify the practical relevance of this subject and be able to apply their knowledge in an ever wider set of familiar and new contexts. Yet, this will only be possible if the children's appreciation of the subject is also nurtured, such that they gain a sense of enjoyment and a curiosity about maths. A solid mathematical knowledge and understanding can be seen in the fields of

science, engineering and technology but is an element in most forms of employment, as well as being a crucial part of personal financial literacy and household management. Maths is so much more than a school subject.

*'A high-quality mathematics education therefore provides 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 about the subject.'*

(National Curriculum July 2014)

Our intention here at St Matthew's CPS is to help children:

- enjoy maths through practical activity, exploration and discussion
- understand the importance of mathematics in everyday life
- become confident and competent with numbers and the number system
- become fluent in the fundamentals of mathematics
- develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately
- to reason mathematically by following a line of enquiry,
- spot relationships across domains, make generalisations and express an opinion using mathematical language
- solve problems by applying their mathematics to a variety of routine and non-routine problems, including breaking down problems into a series of simpler steps
- keep persevering in seeking solutions and be aware that there are often many or even no solution
- develop an appreciation of the creative aspects of maths; awareness of its aesthetic appeal
- see the historic context and present day relevance of mathematics

### Implementation

Maths is a core subject, given significant time on the timetable, with a daily lesson in every class, and Basic Skills sessions placed strategically throughout each week. We follow the Singapore Maths system, a primary school programme which is fully aligned to the new National Curriculum. Our school has embedded

the Singapore curriculum in Years 1 to 6. Each area is progressive, with topics from the curriculum and skills identified and built upon year after year. The sequence of calculations in terms of size of number and complexity is also identified by year group. Children learn calculation methods, but then look at the inverse, see these applied in real-life situations, in problems including missing-box questions, and in open ended investigations.

The concept of teaching mathematics to mastery is to ensure that topics are well developed. Pupils will spend enough time to fully explore a concept before moving on to a different topic. As ideas are well formed they are reinforced by ample practice. New knowledge is then used on subsequent lessons so that all ideas build on top of each other and pupils have ample opportunity to develop relationships between the topics. Ideas are revisited in a spiral as pupils progress through the years, each time at a higher level. This ensures that the children see maths in a wider context, in different formats and in increasingly complex forms. Links are made with other subjects and the maths used cross-curricular, is of an appropriate standard for the age group.

The subject is well resourced with practical materials, and children are expected to learn when and where to use these resources. Plus, they should over time, identify which calculations need a practical tool for support; which should be completed using a formal method; and which should be done mentally or with jottings. Teachers use and emphasise mathematical vocabulary, and link the teaching to real-life situations, wherever possible.

Assessment takes place during every lesson, so that children are moved on quickly; at the end of a topic; and formally each term, to ensure that the children have achieved and continue to achieve. Support and intervention (for those who need it) is key in maths lessons, but the children are encouraged to work independently and strategically through their tasks.

### Impact

Mathematical confidence, with the ability to take on new challenges and yet draw on previous experience, ensures that the children are ready to face the mathematical realities of everyday life. The impact and success of maths teaching is seen in the high scores in test situations; the monitored progress of each child; the positive outcomes of the pupil voice questionnaires and interviews; and the children's independence in lessons.