Maths at St Margaret's

At St. Margaret's we embrace the mastery approach to the teaching and learning of mathematics, where children are taught to become competent and independent mathematicians.

We have high aspirations for all learners, rejecting the idea that some pupils 'just can't do maths'. As such, pupils are taught through whole-class interactive teaching, where the focus is on all pupils working together on the same lesson content at the same time. This ensures that all can master concepts before moving to the next part of the curriculum sequence. Differentiation is through depth and not breadth. Pupils who grasp concepts rapidly are challenged through rich and sophisticated problems that encourage them to explore a concept in greater depth, reason about their learning or make new connections.

Our Curriculum

Our curriculum is designed to enable our pupils to develop a secure understanding of each area of mathematics, recognising the rich and varied connections between them. It is our intention to ensure that all children are fluent in the fundamentals of mathematics. Children are encouraged to be flexible and adaptable, applying their learning to investigate, reason and solve increasingly sophisticated problems. Through mathematical talk, children will develop the ability to articulate, discuss and explain their thinking. We aspire to develop a natural curiosity and love of maths, where children are equipped with the confidence, resilience and resourcefulness needed to use maths within all aspects of everyday life.

The curriculum is sequenced in small steps, following the guidance offered by the White Rose Maths Hub and Power Maths. Topics are taught in blocks to allow children to acquire a depth of understanding in each area of maths, before moving on. Significant time is spent developing deep knowledge of the key ideas that are needed to underpin future learning. All topics are regularly revisited and applied to other areas of learning, making cross curricular links where relevant, to ensure the retention of knowledge over time. The structure and connections within the mathematics are emphasised, so that pupils develop deep learning that can be sustained.

It is our intention to ensure that all children are fluent in the fundamentals of mathematics. Daily retrieval tasks are used to develop fluency and coherence. This includes helping children to learn to recall key facts automatically, giving children the opportunity to practise written methods of calculation and regularly revisiting key/ relevant skills.

Maths is categorised into four main groups: Number; Measurement; Geometry; Statistics. When we refer to the progression of skills in maths, this can be subdivided into the following groups: Place Value; Addition & Subtraction; Multiplication & Division; Fractions; Ratio & Proportion; Algebra; Measurement; Geometry- Properties of Shape; Geometry- Position & Direction; Statistics.

EYFS and Mathematics

In the Foundation Stage, children begin to explore mathematics through the 'Mathematics' area of the Early Years Foundation Stage (EYFS) curriculum. Learning is embedded within play-based experiences that reflect children's interests and everyday encounters, ensuring mathematics feels meaningful and accessible. At St Margaret's, we have designed our own bespoke Maths curriculum for Reception, carefully aligning it with the Early Learning Outcomes and Goals to build secure foundations for future mathematical understanding. We also make effective use of the NCETM's Numberblocks resources, which support children's engagement and deepen conceptual understanding through familiar characters and rich mathematical stories.

Through hands-on exploration with resources such as tens frames, manipulatives, and visual models, children develop a strong sense of number to 10, alongside spatial reasoning and essential mathematical vocabulary. They

are encouraged to spot patterns, talk about what they notice, and articulate their thinking. These experiences nurture curiosity, confidence, and a positive attitude towards mathematics, while fostering a classroom culture where mistakes are seen as valuable learning opportunities—laying the groundwork for mathematical mastery in later years.

Key Stage 1

Fluency- in Key Stage 1, we use the Mastering Number programme, which is aimed at improving early number sense. Children access regular, short, Mastering Number sessions in order to secure firm foundations in number sense and leave KS1 with fluency in calculation, and confidence and flexibility with numbers. Mastering Number sessions focus on additive relationships, subitising, and understanding number structures. Children use manipulatives like rekenreks (bead frames) to support visual and conceptual understanding.

Curriculum- children in KS1 start each year with a unit on place value, which allows them to develop their understanding of the value of each digit within a number. Place value is the foundation on which all other areas of maths are built; it helps children to build number sense and develop calculation skills. The KS1 curriculum follows a progressive structure, building on prior knowledge in small steps. After securing their understanding of place value within 10, children use the knowledge and skills learnt to develop their ability to add and subtract within 10. Children then progress to place value, addition and subtraction within 20. This is then followed by units such as multiplication, fractions, time and money.

Key Stage 2

Fluency- in Key Stage 2, children complete daily retrieval activities in order to revisit prior learning and allow them to make connections and commit information to long term memory. Retrieval tasks give children further opportunities to develop fluency in number facts and practise calculation methods.

Curriculum- as with Key Stage 1, children in Key Stage 2 start each year with a unit on place value, to secure their understanding of number and digit value. Each year group covers the same areas, such as place value, fractions and measure, with the content of these areas deepening year on year so that children can further their understanding and achieve true mastery of mathematical concepts. All year groups follow a similar curriculum structure, beginning with place value and progressing through addition & subtraction; multiplication & division; fractions, and then moving on to aspects of measurement, geometry and statistics. New topics, such as decimals and percentages are added as children progress throughout school, always building on the small steps that have been taught previously.

Geometry

In some year groups, geometry is taught weekly, while in other year groups it is taught in blocks. This is subject to the year group's timetable and the needs of the children. Some areas of measurement, such as area and perimeter, cross over with geometry and may be taught as part of geometry in year groups that teach geometry weekly.

Times Tables

Children all have access to TT Rockstars, both in school and at home. At the beginning of each academic year, all children complete a short 'Gig' session in order to set a baseline and allow teachers to track their progress. At St Margaret's, we also use the NCETM times tables booklets to develop fluency and rapid recall of times table facts, including the accompanying division facts. The booklets are completed daily, with children being given two minutes to answer their questions, followed by a call and response session. Each times table has its own booklet; the first part of each booklet focuses on the first half of the times table, the second part focuses on the second

half of the times table and the final part of each booklet features a medley of questions from all of the times tables that the children have learnt previously.

Maths Curriculum Overview

	Autumn	Spring	Summer
Year 1	Place Value (within 10) Addition & Subtraction (within 10) Shape	Place Value (within 20) Addition & Subtraction (within 20) Place Value (within 50) Length & Height Mass & Volume	Multiplication & Division Fractions Position & Direction Place Value (within 100) Money Time
Year 2	Place Value Addition & Subtraction Shape	Money Multiplication & Division Length & Height Mass, Capacity & Temperature	Fractions Time Statistics Position & Direction
Year 3	Place Value Addition & Subtraction Multiplication & Division A	Multiplication & Division B Length & Perimeter Fractions A Mass & Capacity	Fractions B Money Time Shape Statistics
Year 4	Place Value Addition & Subtraction Area Multiplication & Division A	Multiplication & Division B Length & Perimeter Fractions Decimals A	Decimals B Money Time Shape Statistics Position & Direction
Year 5	Place Value Addition & Subtraction Multiplication & Division A Fractions A	Multiplication & Division B Fractions B Decimals & Percentages Perimeter & Area Statistics	Shape Position & Direction Decimals Negative Numbers Converting Units Volume
Year 6	Place Value Addition, Subtraction, Multiplication & Division Fractions A Fractions B Converting Units	Ratio Algebra Decimals Fractions, Decimals & Percentages Area, Perimeter & Volume Statistics	Shape Position & Direction

Monitoring and Assessment

Assessment is vital to ensure the curriculum continues to be ambitious, to check children's understanding is strong and to facilitate adaptations in teaching to ensure all children make progress. Children complete a pre-assessment at the beginning of each new unit. They then complete an end of block assessment at the end of each unit, to ascertain what they have learnt. Towards the end of each term, children complete a summative assessment which will encompass all that they have learnt so far.

Monitoring is carried out regularly and can be seen in many different forms; we carry out pupil voice and staff voice, alongside analysis of children's work and maths learning walks.