



ST RICHARD REYNOLDS CATHOLIC COLLEGE

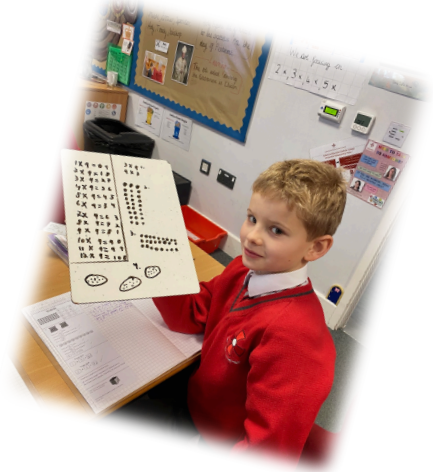
ST RICHARD REYNOLDS CATHOLIC PRIMARY SCHOOL
ST RICHARD REYNOLDS CATHOLIC HIGH SCHOOL

St Richard Reynolds is a Catholic community rooted in the love of Christ in which we help each other to become the person whom God has created us to be.

LOVED, LISTENED TO, CHALLENGED, INSPIRED

Mathematics Subject Story

Curriculum Intent



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. 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.

At St. Richard Reynolds, we have adopted a mastery approach in order to deliver the three aims of the National Curriculum, fluency, reasoning and problem solving. Underpinning this pedagogy is a belief that all children can achieve in Maths. We believe in promoting sustained and deepening understanding by employing a variety of mastery strategies, with teaching for conceptual understanding at the heart of everything we do. Our approach aims to provide all children with full access to the curriculum, enabling them to develop independence, confidence and competence – 'mastery' in mathematics in order to be independent mathematicians who are well equipped to apply their learning to the wider world.

Maths is a subject specific lesson, which builds upon previously taught knowledge, skills and vocabulary covered in our progression grids. We aim to develop children's enjoyment of maths and provide opportunities for children to build a conceptual understanding of maths before applying their knowledge to everyday problems and challenges.

Our intent:

We want all children to become fluent in the fundamentals of mathematics so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

We want all children to reason mathematically by developing an argument, justification or proof using mathematical language.

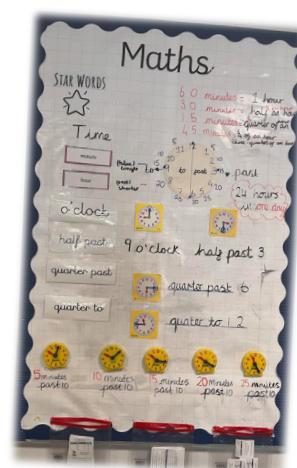
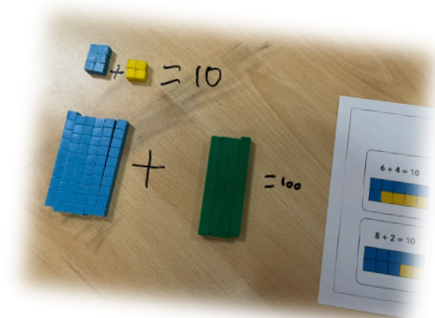
We want all children to solve problems by applying their mathematics with increasing sophistication, including breaking down problems into small steps and to persevere in seeking solutions.

Curriculum Implementation

Our school is currently on a journey sustaining a mastery approach to teaching in our aim to provide a deep, long-term, secure and adaptable understanding of the subject. St. Richard Reynolds is currently working alongside the London South West Maths HUB. We are currently part of the teaching for mastery 'Sustaining work group' where we continue to develop to sustain our teaching for mastery approach to mathematics. We strongly believe that becoming a mastery school will help us to deliver our mathematical intent and raise attainment and enjoyment of mathematical learning throughout the school.

We use the professional development materials created by the National Centre for Excellence in teaching Maths and White Rose SOL to support planning, teaching and learning of mathematics.

Lessons are taught using carefully selected models and images to support children's learning. They are carefully structured to move in very small steps, and to include a variety of ways of presenting the maths. Our mathematics curriculum is structured into units for each year group. Each unit builds upon learning from the previous year group and has been designed so that links between concepts can be made. Units are designed to focus on one specific area of the mathematics curriculum so that pupils have time to deepen their understanding as well as making connections across the different areas of learning.



In classrooms, there are many systems in place to support us in achieving our aims. Throughout the school, children are taught to become fluent in the key mathematical concepts.

- In EYFS, Reception class has a Number of the Week, within which pupils are taught to make connections and apply their understanding of mathematical concepts through just one number.
- Practical investigations using carefully selected resources used to develop conceptual understanding.
- In line with the mastery approach, every maths lesson blends fluency, reasoning and problem solving to develop a depth of understanding across the mathematics curriculum.
- To support mathematical progress in KS1, we use the Numicon 'Closing the Gap' intervention program. This approach turns abstract concepts into visual, concrete connections that help pupils overcome barriers to maths learning.
- To support mathematical progress across KS2, we use Doodle Maths. This adaptive learning platform targets learning gaps and boosts mathematical progress.
- For children who need additional time to master key concepts, pre-teach sessions take place to reduce attainment gaps before they move on to new content.
- To foster flexible thinking, we embed structured mental maths discussions into our daily practice. This approach places a strong emphasis on oracy, providing a purposeful space for pupils to articulate their mathematical reasoning.
- We use Working Walls across the school as an active learning tool. They provide a visual journey of the current topic complete with key vocabulary and stem sentences providing a constant point of reference that scaffolds learning and ensures every child can succeed.

- Across the school a CPA (concrete, pictorial and abstract) approach is applied to support depth of understanding across calculations and mathematical concepts.
- Times Tables Rockstars is used by children from Year 2 to 6 as a fun and motivational tool for practicing multiplication facts.

Curriculum Outcomes

End of KS1			
Maths EXS +	93%	93%	97%
Maths GDS	41%	47%	27%

Local and National Averages for KS1 Data are no longer available as SATS at KS1 are no longer statutory

Year 4 Multiplication Tables Check

Average Mean Score /25	Multiplication Tables Check								
	SRRCC			Richmond			National		
	2024	2025	2026	2024	2025	2026	2024	2025	2026
	23.9	22.2	22.8	22.4	22.5	TBC	20.6	21	TBC

End of Key Stage 2

Expected + Standard	Maths								
	SRRCC			Richmond			National		
	2024	2025	2026	2024	2025	2026	2024	2025	2026
	97%	100%	100%	86%	88%	TBC	73%	74%	75%

Greater Depth Standard	Maths								
	SRRCC			Richmond			National		
	2024	2025	2026	2024	2025	2026	2024	2025	2026
	40%	73%	90%	40%	46%	TBC	24%	26%	27%

If you were to walk into maths lessons at St Richard Reynold's, you would see:

- Small steps between and within lessons. Each lesson has one, small key point.
- Stem sentences are clearly displayed in classrooms to develop children's mathematical language and oracy skills when making connections in their learning and to support pupils' ability to reason mathematically.
- Each lesson begins with 'Sticky Learning' a retrieval of previous knowledge from a variety of topics covered to develop cognitive memory skills before introducing key mathematical vocabulary.
- Children are expected to understand and use the correct, precise mathematical vocabulary when explaining their maths. Due to a consistent approach across the school, the children are confident to do this both verbally and in written work.
- Children will always review their learning from the previous day before discovering new learning in each lesson to deepen connections to new concepts and procedures.
- Questions are carefully planned and used throughout the lesson to target children's fluency and reasoning skills.
- Ping pong style teaching 'my turn/your turn' where ideas and activities regularly move from teacher to children and back again.
- Children are given opportunities to share and critique answers or strategies. They are encouraged to use stem sentences, key mathematical vocabulary and to speak in full sentences.
- Children are encouraged to identify and recognise patterns and rules, rather than just shown how to find the answer.
- Concrete, pictorial and abstract representations are used fluidly to allow deep, sustainable learning for all.
- Children are given opportunities to practise and use their number skills and apply them in different contexts.
- To inspire and encourage our children to be reflective learners and use metacognition (critical thinking of oneself as a thinker and a learner) in distinctly mathematical ways, we have embedded five core actions (*Draw it, Explain it, Make a mistake, Tell a maths story and Prove it*) as an everyday toolkit that empowers them to take ownership and dive deeper into their learning.

Pupil Voice

What do you enjoy about Maths?

EYFS: *I like singing number songs with my friends.*

Key Stage 1 (Year 2): *I enjoy challenging myself in Maths and always try to get to the dive-deeper questions.*

Key Stage 1 (Year 4): *I enjoy learning my times tables and working with my talk partner to solve problems.*

What helps you to improve in Maths?

EYFS: *My teacher helps me when I get stuck and shows me what to do.*

Key Stage 1 (Year 2): *I like using counters and base ten blocks because they help me see how many tens and ones there are in a number.*

Key Stage 1 (Year 4): *Verbal feedback from my teacher helps me understand how to improve my work.*

An example of skill progression within our mathematics curriculum

Mathematical area of learning: Number and place value						
Reception:	Year 1:	Year 2:	Year 3:	Year 4:	Year 5:	Year 6:
Selects the correct numeral to represent 1 to 5, then 1 to 10 objects.	Count, read and write numbers to 100 in numerals.	Read and write numbers to at least 100 in numerals and words.	Read and write numbers up to 1,000 in numerals and in words.	Recognise the place value of each digit in a four digit number.	Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.	Read, write, order and compare numbers to at least 10,000,000 and determine the value of each digit.

Outstanding examples of learning

