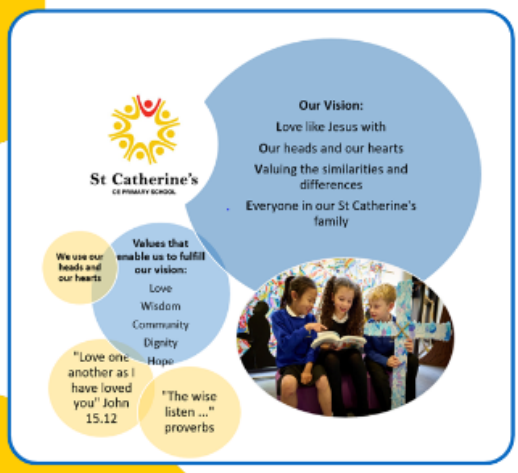
ST CATHERINE'S CE PRIMARY SCHOOL MATHEMATICS CURRICULUM OVERVIEW



In every maths lesson at St Catherine's, we aim to nurture not only capable mathematicians but also thoughtful, confident, and compassionate learners who engage deeply and live wisely. Our approach embodies our vision to learn with both head and heart through five guiding principles:

Mistakes are valuable – We embrace mistakes as vital stepping stones in the learning journey. With our hearts, we cultivate resilience, compassion, and courage to face challenges. With our heads, we reflect, analyse, and grow stronger through each experience.

Everyone can learn maths to the highest level – Rooted in our commitment to equality, we celebrate the similarities and differences of every learner and maintain high expectations for all, ensuring every child has the opportunity to thrive.

Questions are really important – Curiosity sparks discovery. We encourage asking and exploring questions, fostering critical thinking (head) alongside respect and empathy for others' ideas (heart), creating a classroom culture rich in inquiry and shared growth.

Depth is more important than speed – True understanding blossoms through patience, reflection, and exploration. We teach children to 'dig deeper,' developing profound comprehension (head) while honouring each learner's unique pace and journey (heart).

Maths is about making connections – We help children see mathematics as an interconnected web of ideas, not isolated facts. With our heads, we reason and relate concepts; with our hearts, we recognise the real-world purpose and relevance of maths in everyday life.

Together, these principles ensure that maths at St Catherine's is not just about numbers, but about growing wise thinkers and loving learners; embracing challenge with courage, curiosity, and kindness.

OUR INTENTION IS TO ENSURE THAT THE CHILDREN AT OUR SCHOOL:

- ENJOY IT
- BELIEVE THEY CAN DO IT
- SEE THE PURPOSE IN IT
- DO IT CONFIDENTLY
- CAN DO IT NOW, TOMORROW AND FOREVER

EVERY SUBJECT, EVERY CROSS- CURRICULAR THEME, EVERY ASPECT OF OUR WORK IS AN 'IT'!
EVERY CHILD HAS AT LEAST ONE 'IT' – WE NEED TO FIND IT!

St Catherine's C of E Primary School

Maths Curriculum

At St. Catherine's, our maths curriculum is designed not only to teach mathematical skills but also to nurture a deep, confident understanding of mathematical concepts. We believe that all children can achieve excellence in mathematics, and our teaching reflects a growth mindset approach that encourages every child to see themselves as capable mathematicians.

Classroom Beliefs

Each maths lesson begins with the reinforcement of our Classroom Beliefs, which are fundamental to fostering a positive attitude towards learning. These beliefs help children develop resilience and a sense of ownership in their learning:

- Mistakes are valuable: We embrace mistakes as opportunities to learn and grow.
- Everyone can learn maths to the highest level: All children are capable of mastering mathematical concepts with the right support and mindset.
- Depth is more important than speed: A thorough understanding of concepts is prioritised over simply working quickly.
- Questions are crucial: Asking questions leads to deeper thinking and greater comprehension.
- Maths is about making connections: Seeing relationships between different mathematical ideas is key to understanding.

Inclusive, Whole-Class Teaching

Our approach to maths is built on whole-class teaching, where children are taught as a single group, without ability grouping. This ensures that all children have access to the same high-quality teaching, and that no child is restricted by labels or grouping. This inclusive approach encourages all learners to engage with challenging concepts, with additional support provided where needed to help children "catch up and keep up."

Collaborative Learning Partners

Learning partners play a central role in our lessons, promoting collaboration and peer learning. Partners are often of mixed ability, which helps to scaffold learning for some while stretching others. Partners are changed frequently to foster a culture of teamwork and mutual support.

Real-Life Contexts in Maths

We believe that making maths relevant to everyday life is crucial for engagement and understanding. By embedding maths lessons in real-life contexts, we help children to see the practical applications of mathematics, making abstract concepts more tangible and meaningful. This approach also enhances mathematical vocabulary and encourages children to think critically about how maths operates in the world around them.

Structured Lesson Approach

From Year 2 to Year 6, maths is taught through a two-part daily structure:

- Morning Maths: A 25-minute session focused on consolidation, rehearsal, and pre-teaching, helping to build fluency and revisit key concepts.

- Main Maths Lesson: A longer session of approximately one hour, dedicated to introducing new learning. These sessions also focus on fluency in key areas such as number bonds and times tables, using programs like White Rose and Power Maths to guide instruction.

In Year 1, a short fluency session is integrated into the afternoon, focusing on number facts, while in Reception, children engage with Power Maths through hands-on, exploratory activities that are embedded within their learning environment.

Mastery Approach

Our curriculum is underpinned by the Mastery Approach, ensuring that all children develop a deep, conceptual understanding of mathematics. Lessons are carefully planned around the five key principles of mastery:

- Coherence: Small steps are introduced in a logical sequence to build secure knowledge.
- Representation and Structure: Concrete materials and visual models are used to represent mathematical ideas, helping children to understand and apply abstract concepts.
- Mathematical Thinking: We encourage children to think deeply about problems and articulate their reasoning.
- Fluency: Fluency in basic mathematical skills is developed through practice and repetition.
- Variation: We expose children to multiple methods and approaches to problem-solving, fostering flexibility in their thinking.

Concrete-Pictorial-Abstract Approach

New concepts are introduced using the Concrete-Pictorial-Abstract (CPA) model:

- Concrete: Children begin by using physical manipulatives (e.g., counters, blocks) to explore new concepts.
- Pictorial: They then move to visual representations of the concept (e.g., diagrams, models).
- Abstract: Finally, they transition to understanding and applying the concept without physical aids, working purely with numbers and symbols.

Engaging, Rich Tasks

Every lesson is designed to include deep, rich tasks that allow all children to engage meaningfully, regardless of their starting point. These tasks, which may be framed as a ‘Big Question’ during reviews, challenge children to apply their knowledge in complex, meaningful ways. Partner discussions and independent applications are key features of our lesson structure, ensuring that children have opportunities to articulate their understanding and explore their ideas.

Feedback and Reflection

We believe that immediate, constructive feedback is essential for progress. Teachers and teaching assistants actively engage with children throughout each lesson, offering timely feedback through a helicopter marking approach. In KS2, children take an active role in their own learning by using a blue pen to mark or correct their work, encouraging reflection and ownership of their learning process.

St Catherine's
CE PRIMARY SCHOOL

Dynamic Lesson Delivery: The Ping-Pong Approach

Our lessons follow a ping-pong approach, where instruction and application alternate swiftly, keeping children engaged and ensuring that all learners move forward together. This dynamic method allows for continuous reasoning and explanation, as children are constantly encouraged to 'go deeper' into tasks.

Consistency and Planning

Our teachers collaborate closely, planning lessons in PPA sessions with their teaching partners. This ensures consistency in delivery and progression throughout the school. White Rose block teaching and medium-term plans provide the structure for curriculum coverage, supplemented by additional resources such as Maths No Problem and Power Maths.

Maths Working Walls

Each classroom features a dedicated Maths Working Wall, which is an evolving display of key concepts, strategies, and vocabulary. These walls are interactive learning tools, designed to support children's understanding and to be referenced during lessons.

Targeted Support and Inclusion

We believe that all children can succeed in maths. Differentiation is not typically used in lessons; however, targeted support is provided to ensure that all students are able to keep up with the pace of learning. Only when a child's specific needs dictate an alternative approach will they work outside this structure.

Early Years Focus

In Early Years, our use of Power Maths reflects the mastery approach throughout the school. Children engage in playful, hands-on activities that promote early mathematical thinking, all within a rich, child initiated environment. This approach ensures that even our youngest learners begin their mathematical journey with confidence and enthusiasm.

Our Intention is to ensure that the children at our school:

- **Enjoy it**
- **Believe they can do it**
- **See the purpose in it**
- **Do it confidently**
- **Can do it now, tomorrow and forever**

Every subject, every cross- curricular theme, every aspect of our work is an 'it'!

Every child has at least one 'it' – we need to find it!