



Hillside Primary School

Mathematics Curriculum Intent

At Hillside Primary School, our Mathematics curriculum is designed to place the needs and aspirations of our pupils at the heart of their learning. Mathematics is a creative discipline that helps our pupils understand and change the world. We want all children to experience the beauty, power, and enjoyment of mathematics, fostering a sense of curiosity that helps them **"Be the BEST they can be"**.

Our curriculum is underpinned by four key attitudes for learning:

- **BELIEVE:** We foster positive 'can do' attitudes, believing that all children can achieve in mathematics.
- **ENGAGE:** We spark curiosity and engagement by using mistakes and misconceptions as an essential, non-threatening part of learning.
- **SUCCEED:** Success is rooted in secure and deep understanding, ensuring all pupils become fluent in fundamentals before moving to sophisticated problems.
- **TRY:** We cultivate resilience by challenging pupils with rich problems that require "hard work" and perseverance.

The Mathematical Framework

We deliver a high-quality curriculum that equips pupils with Substantive Knowledge (foundational facts and conceptual understanding) and Disciplinary Knowledge (the ability to reason and problem-solve). Our curriculum follows a knowledge-rich sequence where learning is broken down into manageable steps.

BELIEVE: Building Confidence & Belonging

- **Vocabulary for Success:** We believe mathematical vocabulary is the gateway to achievement. Pupils use precise terminology—such as 'commutative', 'inverse', and 'equivalence'—to justify their arguments and proofs.
- **Inclusive Achievement:** Through a "Can Do" approach, we ensure all pupils—regardless of background—believe they can access Age Related Expectations. We provide challenge through depth rather than acceleration through new content.

ENGAGE: Curiosity & Connection

- Mathematical Enquiry: Pupils engage as active researchers. Following the "Hook It" introduction, they follow lines of inquiry to develop justifications and mathematical arguments.
- Active Learning: Every child engages in the "Practise It" phase, where the whole class explores new learning together with explicit modeling of potential misunderstandings.

SUCCEED: Precision & Mastery

- Chronological Recall (Daily Arithmetic sessions including Numbersense and Mastering Number): Success is rooted in the ability to recall and apply knowledge rapidly. Through daily arithmetic meetings, pupils engage in deliberate practice of "Past and Present" learning and to ensure long-term retention. They also practise additive and multiplicative facts to build fluency.
- Procedural Fluency: During the "Do It" phase of lessons, pupils master "What it is" and "What it's also" to achieve precision in their calculations.

TRY: Resilience & Hard Thinking

- Conceptual Challenge: We cultivate a culture where children are not afraid to "try". In the "Stretch It" phase, pupils develop resilience by identifying errors in "True/False" or "Spot the Mistake" scenarios.
- Hard Thinking: The "Solve It and Apply it" phase requires pupils to apply their understanding to unfamiliar contexts and real-life scenarios and word problems, embracing the challenge of sophisticated problem-solving.

Working as a Mathematician: Disciplinary Progress

Our pupils build the "connective tissue" of mathematics by progressing through three levels of challenge in every unit :

Strand	Challenge 1: "Do It"	Challenge 2: "Stretch It"	Challenge 3: "Solve It and Apply It"
Focus	Procedural Fluency	Conceptual Understanding	Mathematical Thinking
Activity	Up to 5 examples of standard procedures.	Addressing 1 or 2 misconceptions/errors.	Applying understanding to new, non-routine problems.

EYFS: Foundations for a "Can Do" Mindset

In the Early Years Foundation Stage (EYFS), we lay the groundwork for mathematical success by focusing on a deep understanding of numbers to 10 and the patterns within them.

- The "Believe" Attitude: From their first days, children are encouraged to see themselves as mathematicians through play-based exploration and direct teaching.
- Substantive Concepts: Our EYFS curriculum prioritises "Number Sense," including subitising (recognising quantities without counting), the composition of numbers, and verbal counting patterns.
- Disciplinary Beginnings: Children begin to "think like mathematicians" by comparing quantities and noticing patterns, such as "one more" or "even and odd" distributions.
- Transition to KS1: The EYFS curriculum uses the same "Can Do" terminology and "manageable steps" to ensure a seamless transition into the formal Year 1 "Hook It, Teach It, Practise It" lesson structure.

Through this vocabulary-rich, sequential curriculum, Hillside pupils do not just "learn" maths; they think like mathematicians, building the character and "Can Do" mindset needed to thrive in the modern world.