Maths Curriculum Map

At the South Hams Federation, we have chosen NCETM to underpin the teaching and learning of Maths.

Why have we chosen NCETM?

Underpinning principles

- Mathematics teaching for mastery assumes everyone can learn and enjoy mathematics.
- Mathematical learning behaviours are developed such that pupils focus and engage fully as learners who reason and seek to make connections.
- Teachers continually develop their specialist knowledge for teaching mathematics, working collaboratively to refine and improve their teaching.
- Curriculum design ensures a coherent and detailed sequence of essential content to support sustained progression over time.

Lesson design

- Lesson design links to prior learning to ensure all can access the new learning and identifies carefully sequenced steps in progression to build secure understanding.
- Examples, representations and models are carefully selected to expose the structure of mathematical concepts and emphasise connections, enabling pupils to develop a deep knowledge of mathematics.
- Procedural fluency and conceptual understanding are developed in tandem because each supports the development of the other.
- It is recognised that practice is a vital part of learning, but the practice must be designed to both reinforce pupils' procedural fluency and develop their conceptual understanding.

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In the classroom

- Pupils are taught through whole-class interactive teaching, enabling all to master the concepts necessary for the next part of the curriculum sequence.
- In a typical lesson, the teacher leads back and forth interaction, including questioning, short tasks, explanation, demonstration, and discussion, enabling pupils to think, reason and apply their knowledge to solve problems.
- Use of precise mathematical language enables all pupils to communicate their reasoning and thinking effectively.
- If a pupil fails to grasp a concept or procedure, this is identified quickly, and gaps in understanding are addressed systematically to prevent them falling behind.
- Significant time is spent developing deep understanding of the key ideas that are needed to underpin future learning.
- Key number facts are learnt to automaticity, and other key mathematical facts are learned deeply and practised regularly, to avoid cognitive overload in working memory and enable pupils to focus on new learning.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Previous Reception experiences and counting within 100 Comparison of quantities and part–whole relationships Numbers 0 to 5		Recognise, compose, decompose and manipulate 2D and 3D shapes Numbers 0 to 10 Additive structures Addition and subtraction facts within 10		Numbers 0 to 20 Unitising and coin recognition Position and direction Time	

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Year 2	Numbers 10 to 100 Calculations within 20 Fluently add and subtract within 10 Addition and subtraction of two-digit numbers (1) Introduction to multiplication	Introduction to multiplication Introduction to division structures Shape Addition and subtraction of two-digit numbers (2)	Money Fractions Time Position and direction Multiplication and division – doubling, halving, quotative and partitive division Sense of measure – capacity, volume, mass
Year 3	Adding and subtracting across 10 Numbers to 1,000	Right angles Manipulating the additive relationship and securing mental calculation Column addition 2, 4, 8 times tables Column subtraction	Unit fractions Non-unit fractions Parallel and perpendicular sides in polygons Time
Year 4	Review of column addition and subtraction Numbers to 10,000 Perimeter 3, 6, 9 times tables	3, 6, 9 times tables Understanding and manipulating multiplicative relationships Understanding and manipulating multiplicative relationships Coordinates	Review of fractions Fractions greater than 1 Symmetry in 2D shapes Time Division with remainders
Year 5	Decimal Fractions Money Negative numbers Short multiplication and short division	Area and scaling Calculating with decimals and fractions Factors, multiples and primes	Fractions Converting units Angels
Year 6	Calculating using knowledge of structures (1)	Multiplication and division	Ratio and proportion

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	Multiples of 1000 Numbers up to 10,000,000 Draw, compose and decompose shapes	Area, perimeter, direction and position Fractions and percentages Statistics	Calculating using knowledge of structures (2) Solving problems with two unknowns Order of operations Mean average