Curriculum: Mathematics

EYFS

TERM 1	TERM 2	TERM 3	TERM 4	TERM 5	TERM 6
Units - Just like me, It's me 1,2 and 3 and Light and Dark Number – Match and Sort/Compare Amounts, Representing, Comparing and Composition of 1, 2, 3, Representing numbers to 5, One more or less. Measure Shape and Spatial – Patterns, Mass and Size, Circles and triangles/Positional Language, Shapes with 4 Sides/Time		**Units - Alive in 5! Growing 6, 7, 8 and Building 8 and 10.** Number –Introducing Zero, Comparing numbers to 5, composition of 4 and 5, 6,7,8, Combining two amounts, Making pairs, Counting to 9 and 10, Comparing numbers to 10 and bonds to 10. Measure Shape and Spatial – Comparing mass and capacity, Length, Height and Time, 3D shapes and patterns		**Units – To 20 and beyond and First, then and now, Find my pattern and On the Move** Number – Building Numbers beyond 10, Counting Patterns beyond 10, Adding More and Taking Away, Doubling, Sharing and Grouping, Even and Odd, Deepening Understanding of Patterns and Relationships Measure Shape and Spatial – Spatial Reasoning, Match, Rotate and Manipulate, Compose and Decompose Visualise and Build, Mapping	

YEAR 1

TERM 1	TERM 2	TERM 3	TERM 4	TERM 5	TERM 6
Number – Place Value (Within 10), Addition and Subtraction (Within 10) **Geometry** - Shape **Problem Solving Foci:** Visualising, Reasoning Logically and Working Backwards		**Number** – Place Value (within 20), Addition and Subtraction (within 20), Place Value (within 50) **Measurement** – Length and Height, Mass and Volume **Problem Solving Foci:** Conjecturing, Working systematically, Looking for Patterns, Trials and Improvement		**Number –** Multiplication and Division, Fractions, Place Value (within 100) **Geometry –** Position and Direction **Measurement –** Money and Time **Problem Solving Foci:** Visualising, Reasoning Logically, Working Systematically and Looking for Patterns.	

YEAR 2

TERM 1	TERM 2	TERM 3	TERM 4	TERM 5	TERM 6
Number – Place Value, Addition and Subtraction **Geometry –** Shape **Problem Solving Foci:** Visualising, Reasoning Logically and Working Backwards		**Number –** Multiplication and Division **Measurement –** Money, Length and Height and Mass, Capacity and Temperature **Problem Solving Foci:** Conjecturing, Working systematically, Looking for Patterns, Trials and Improvement		**Number –** Fractions **Measurements –** Time **Geometry –** Position and Direction **Problem Solving Foci:** Visualising, Reasoning Logically, Working Systematically and Looking for Patterns.	

YEAR 3

TERM 1	TERM 2	TERM 3	TERM 4	TERM 5	TERM 6
Number – Place Value, Addition and Subtraction, Multiplication and Division **Problem Solving Foci:** Visualising, Reasoning Logically and Working Backwards		**Number –** Multiplication and Division, Fractions **Measurement –** Length and Perimeter, Mass and Capacity **Problem Solving Foci:** Conjecturing, Working systematically, Looking for Patterns, Trials and Improvement		**Number –** Fractions **Measurements –** Money, Time **Geometry –** Shape **Problem Solving Foci:** Visualising, Reasoning Logically, Working Systematically and Looking for Patterns.	

YEAR 4

TERM 1	TERM 2	TERM 3	TERM 4	TERM 5	TERM 6
Number – Place Value, Addition and Subtraction, Multiplication and Division **Measurement –** Area **Problem Solving Foci:** Visualising, Reasoning Logically and Working Backwards		**Number –** Multiplication and Division, Fractions, Decimals **Measurement –** Length and Perimeter **Problem Solving Foci:** Conjecturing, Working systematically, Looking for Patterns, Trials and Improvement		**Number –** Decimals **Measurements –** Money, Time **Geometry –** Shape, Position and Direction **Problem Solving Foci:** Conjecturing, Working systematically, Looking for Patterns, Trials and Improvement	

YEAR 5

TERM 1	TERM 2	TERM 3	TERM 4	TERM 5	TERM 6
Number – Place Value, Addition and Subtraction, Multiplication and Division, Fractions **Problem Solving Foci:** Visualising, Reasoning Logically and Working Backwards		**Number –** Multiplication and Division, Fractions, Decimals and Percentages **Measurement –** Statistics **Geometry –** Perimeter and Area **Problem Solving Foci:** Conjecturing, Working systematically, Looking for Patterns, Trials and Improvement		**Shape –** Position and Direction **Number–** Decimals, Negative Numbers **Measurements –** Converting Units and Volume **Problem Solving Foci:** Conjecturing, Working systematically, Looking for Patterns, Trials and Improvement	

YEAR 6

TERM 1	TERM 2	TERM 3	TERM 4	TERM 5	TERM 6
Number – Place Value, 4 Operations, Fractions **Measurements –** Converting Units **Problem Solving Foci:** Visualising, Reasoning Logically and Working Backwards		**Number –** Ratio, Algebra, Decimals, Fractions, Decimals and Percentages **Measurements –** Area, Perimeter and Volume **Geometry –** Statistics **Problem Solving Foci:** Conjecturing, Working systematically, Looking for Patterns, Trials and Improvement		**Shape –** Position and Direction Assessments Themed Projects **Problem Solving Foci:** Conjecturing, Working systematically, Looking for Patterns, Trials and Improvement	

Curriculum Vision: Mathematics

The Maths curriculum at Sandgate Primary is thoughtfully designed to build knowledge progressively through small steps, guiding pupils through a carefully sequenced journey of essential concepts that connect to prior learning. With a focus on Mastery, our curriculum uses whole-class interactive teaching to reinforce our belief that everyone can enjoy and succeed in mathematics. We aim for our pupils to be mathematically observant, able to make connections between ideas, and to confidently communicate as mathematicians.

Our curriculum promotes equity by offering every pupil an entry point through thoughtfully selected tasks and visual representations, allowing for flexible adaptation to support all learners in building a solid understanding and keeping pace with their peers. When a pupil encounters challenges with a concept or skill, formative assessments help identify and address any gaps promptly, ensuring they remain on track with the rest of the class.

Through regular opportunities for review and retrieval, alongside guided and independent practice, pupils develop a deep, enduring understanding of mathematical concepts. Core number facts are practiced to automaticity, while other key mathematical ideas are mastered and reinforced over time.

Curriculum Threads Maths: Mathematical Concepts

Each concept within the Maths curriculum is designed to ensure that all pupils become fluent in the fundamentals of mathematics giving them the ability to reason mathematically and to solve problems. Children will be taught concepts, representations and associated vocabulary for each of the key concepts (Declarative Knowledge). They will practise and use efficient and accurate methods (Procedural Knowledge) for each of the key concepts and be given the opportunity to use combinations of taught and rehearsed facts and methods to solve problems (Conditional Knowledge). The key areas of learning are-

· **Number** - Place Value, Addition and Subtraction, Multiplication and Division, Fractions,
Decimals, Percentages, Ratio and Algebra.

· **Geometry**- Shape and Position and Direction

· **Measurement**- Length and Height, Mass, Capacity and Volume, Money, Time, Temperature, Area, Perimeter and Converting Units.

· **Statistics**

Curriculum Threads Maths: Teaching for Mastery

The curriculum, supported by the NCETM's Essence of Teaching for Mastery and the 5 Big Ideas, is designed around the following:

- **Coherence:** Interconnected small steps are used to enable a coherent learning progression through the curriculum, providing access for all pupils to develop a deep and connected understanding of mathematics that they can apply and communicate in a range of contexts.
- **Variation:** Variation draws closer attention to a key feature of a mathematical concept or structure through varying some elements while keeping others constant.
    - Conceptual variation involves varying how a concept is represented to draw attention to critical features.
    - Procedural variation considers how the student will 'proceed' through a learning sequence.
- **Representation and Structure:** Carefully selected representations of mathematics are used to expose mathematical structure. The intention is to support pupils in 'seeing' the mathematics, rather than using the representation as a tool to 'do' the mathematics.
- **Mathematical Thinking:** This is central to our children learning mathematics and includes looking for patterns and relationships, making connections, conjecturing, reasoning, and generalising. Pupils actively engage in mathematical thinking in all lessons.
- **Fluency:** Efficient, accurate recall of key number facts and procedures is essential for fluency, freeing pupils' minds to think deeply about concepts and problems, but fluency demands more than this. It requires pupils to have the flexibility to move between different contexts and representations of mathematics, to recognise relationships and make connections, to explain their ideas and to choose appropriate methods and strategies to solve problems.