St Michael's Primary School

Maths: long term planning

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	Colours, matching, sorting, number 1, number 2 subitising, number 2, pattern 1, pattern 2 , consolidation and winter activities		Number 3 subitising, Number 3, number 4, number 4 composition, number 5, number 5 composition, consolidation, number 6, height and length, mass, capacity, consolidation		Sequencing, positional language, more than/ fewer, 2D shape, 3D shape, consolidation, number composition, what comes after?, what comes before?, numbers to 5, consolidation summer	
Reception	**Week 1-10 Mastering Number:** ➢ identify when a set can be subitised and when counting is needed ➢ subitise different arrangements, both unstructured and structured, including using the Hungarian number frame ➢ make different arrangements of numbers within 5 and talk about what they can see, to develop their conceptual subitising skills ➢ spot smaller numbers 'hiding' inside larger numbers ➢ connect quantities and numbers to finger patterns and explore different ways of representing numbers on their fingers ➢ hear and join in with the counting sequence, and connect this to the 'staircase' pattern of the counting numbers, seeing that each number is made of one more than the previous number ➢ develop counting skills and knowledge, including: that the last number in the count tells us 'how many' (cardinality); to be accurate in counting, each thing must be counted once and once only and in any order; the need for 1:1 correspondence; understanding that anything can be counted, including actions and sounds ➢ compare sets of objects by matching ➢ begin to develop the language of 'whole' when talking about objects which have parts		**Week 11-20 Mastering Number:** ➢ continue to develop their subitising skills for numbers within and beyond 5, and increasingly connect quantities to numerals ➢ begin to identify missing parts for numbers within 5 ➢ explore the structure of the numbers 6 and 7 as '5 and a bit' and connect this to finger patterns and the Hungarian number frame ➢ focus on equal and unequal groups when comparing numbers ➢ understand that two equal groups can be called a 'double' and connect this to finger patterns ➢ sort odd and even numbers according to their 'shape' ➢ continue to develop their understanding of the counting sequence and link cardinality and ordinality through the 'staircase' pattern ➢ order numbers and play track games ➢ join in with verbal counts beyond 20, hearing the repeated pattern within the counting numbers **Power Maths Unit 13: Exploring pattern; Unit 10 – Measure**		**Week 21-25 Mastering Number:** ➢ continue to develop their counting skills, counting larger sets as well as counting actions and sounds ➢ explore a range of representations of numbers, including the 10-frame, and see how doubles can be arranged in a 10-frame ➢ compare quantities and numbers, including sets of objects which have different attributes ➢ continue to develop a sense of magnitude, e.g. knowing that 8 is quite a ➢ lot more than 2, but 4 is only a little bit more than 2 ➢ begin to generalise about 'one more than' and 'one less than' numbers within 10 ➢ continue to identify when sets can be subitised and when counting is necessary ➢ develop conceptual subitising skills including when using a rekenrek **Power Maths Unit 17: shape; Unit 18: volume & capacity; Unit 20: Time**	

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	Power Maths Unit 3: 3D & 2D shape; Unit 6: Space		
Year 1	**Unit 1: Numbers to 10 (14 lessons)** ➤ *How do we understand and compare numbers up to 10?* **Unit 2: Part-whole within 10 (7 lessons)** ➤ *How can we break numbers into parts to understand their structure?* **Unit 3: Addition within 10 (4 lessons)** ➤ *How do we add numbers within 10 using different strategies?* **Unit 4: Subtraction within 10 (8 lessons)** ➤ *What does it mean to subtract and how can we show it?* **Unit 5: 2D and 3D Shapes (5 lessons)** ➤ *How can we describe and sort 2D and 3D shapes?*	**Unit 6: Numbers to 20 (12 lessons)** ➤ *How do we count, compare, and understand numbers up to 20?* **Unit 7: Addition and subtraction within 20 (11 lessons)** ➤ *How can we add and subtract numbers up to 20 efficiently?* **Unit 8: Numbers to 50 (7 lessons)** ➤ *What patterns can we find when counting to 50?* **Unit 9: Introducing length and height (4 lessons)** ➤ *How do we compare and measure length and height?* **Unit 10: Introducing weight and volume (7 lessons)** ➤ *How can we describe and compare weight and volume?*	**Unit 11: Multiplication and division (9 lessons)** ➤ *How do we use equal groups to multiply and divide?* **Unit 12: Halves and quarters (4 lessons)** ➤ *What does it mean to find halves and quarters of shapes and quantities?* **Unit 13: Position and direction (5 lessons)** ➤ *How can we describe and follow directions and positions?* **Unit 14: Numbers to 100 (6 lessons)** ➤ *How do we count, read, and write numbers up to 100?* **Unit 15: Money (3 lessons)** ➤ *How do we recognise coins and use them to make amounts?* **Unit 16: Time (5 lessons)** ➤ *How do we tell the time to the hour and half hour*
Year 2	**Unit 1: Numbers to 100 (17 lessons)** ➤ *How do we count, compare, and represent numbers up to 100?* **Unit 2: Addition and subtraction (1) (13 lessons)** ➤ *How can we use number facts and place value to add and subtract?* **Unit 3: Addition and subtraction (2) (12 lessons)** ➤ *What strategies help us solve more complex addition and subtraction problems?* **Unit 4: Properties of shapes (12 lessons)** ➤ *How do we recognise, describe, and sort 2D and 3D shapes?*	**Unit 5: Money (10 lessons)** ➤ *How do we recognise coins and notes and use them to make amounts?* **Unit 6: Multiplication and division (1) (8 lessons)** ➤ *How can we use equal groups to multiply and divide?* **Unit 7: Multiplication and division (2) (10 lessons)** ➤ *What strategies help us solve multiplication and division problems?* **Unit 8: Length and height (5 lessons)** ➤ *How do we measure and compare length and height accurately?* **Unit 9: Mass, capacity and temperature (8 lessons)** ➤ *How do we measure and compare mass, capacity, and temperature?*	**Unit 10: Statistics (7 lessons)** ➤ *How can we collect, organise, and interpret data?* **Unit 11: Fractions (12 lessons)** ➤ *What does it mean to find and use halves, quarters, and thirds?* **Unit 12: Position and direction (5 lessons)** ➤ *How do we describe movement, turns, and positions?* **Unit 13: Time (5 lessons)** ➤ *How do we read and understand time to the nearest 5 minutes?* **Unit 14: Problem solving (11 lessons)** ➤ *How can we apply our maths skills to solve real-world problems?*

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Year 3	**Unit 1: Place value within 1,000 (13 lessons)** ➤ *How do we read, write, and compare numbers up to 1,000?* **Unit 2: Addition and subtraction (1) (10 lessons)** ➤ *How can we use place value to add and subtract efficiently?* **Unit 3: Addition and subtraction (2) (13 lessons)** ➤ *What strategies help us solve more complex addition and subtraction problems?* **Unit 4: Multiplication and division (1) (5 lessons)** ➤ *How do we use arrays and equal groups to multiply and divide?* **Unit 5: Multiplication and division (2) (13 lessons)** ➤ *What patterns and facts help us multiply and divide confidently*	**Unit 6: Multiplication and division (3) (13 lessons)** ➤ *How do we apply multiplication and division to solve problems?* **Unit 7: Length and perimeter (11 lessons)** ➤ *How do we measure and calculate length and perimeter?* **Unit 8: Fractions (1) (10 lessons)** ➤ *What are fractions and how do we find and compare them?* **Unit 9: Mass (7 lessons)** ➤ *How do we measure and compare mass in kilograms and grams?* **Unit 10: Capacity (6 lessons)** ➤ *How do we measure and compare capacity in litres and millilitres?*	**Unit 11: Fractions (2) (8 lessons)** ➤ *How do we add and subtract fractions and find equivalent ones?* **Unit 12: Money (5 lessons)** ➤ *How do we use coins and notes to make amounts and solve problems?* **Unit 13: Time (12 lessons)** ➤ *How do we tell the time using 12-hour and 24-hour clocks?* **Unit 14: Angles and properties of shapes (9 lessons)** ➤ *How do we identify angles and describe 2D and 3D shapes?* **Unit 15: Statistics (7 lessons)** ➤ *How do we collect, interpret, and present data using charts and tables?*
Year 4	**Unit 1: Place value – 4-digit numbers (1) (8 lessons)** ➤ *How do we read and represent 4-digit numbers?* **Unit 2: Place value – 4-digit numbers (2) (8 lessons)** ➤ *How do we compare and order 4-digit numbers?* **Unit 3: Addition and subtraction (16 lessons)** ➤ *How can we use formal written methods to add and subtract 4-digit numbers?* **Unit 4: Area (5 lessons)** ➤ *What is area and how do we measure it?* **Unit 5: Multiplication and division (1) (12 lessons)** ➤ *How do we use place value and known facts to multiply and divide?*	**Unit 6: Multiplication and division (2) (16 lessons)** ➤ *What strategies help us solve more complex multiplication and division problems?* **Unit 7: Perimeter (6 lessons)** ➤ *How do we calculate the perimeter of different shapes?* **Unit 8: Fractions (1) (9 lessons)** ➤ *How do we recognise and compare equivalent fractions?* **Unit 9: Fractions (2) (8 lessons)** ➤ *How do we add and subtract fractions with the same denominator?* **Unit 10: Decimals (1) (12 lessons)** ➤ *What are tenths and hundredths and how do we represent them as decimals?*	**Unit 11: Decimals (2) (7 lessons)** ➤ *How do we compare and round decimals?* **Unit 12: Money (6 lessons)** ➤ *How do we use decimal notation to solve money problems?* **Unit 13: Time (5 lessons)** ➤ *How do we tell the time and solve problems involving duration?* **Unit 14: Geometry – angles and 2D shapes (8 lessons)** ➤ *How do we identify angles and classify 2D shapes?* **Unit 15: Statistics (6 lessons)** ➤ *How do we interpret and present data using charts and graphs?* **Unit 16: Position and direction (6 lessons)** ➤ *How do we describe positions and movements on a grid?*
Year 5	**Unit 1: Place value within 1,000,000 (1) (8 lessons)** ➤ *How do we read and represent numbers up to 1,000,000?*	**Unit 7: Multiplication and division (2) (10 lessons)** ➤ *How do we apply multiplication and division to solve problems?*	**Unit 12: Geometry – properties of shape (12 lessons)** ➤ *How do we classify and measure angles and shapes?*

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	Unit 2: Place value within 1,000,000 (2) (8 lessons) ➤ *How do we compare, order, and round numbers up to 1,000,000?* **Unit 3: Addition and subtraction (12 lessons)** ➤ *How do we use formal methods to solve multi-step addition and subtraction problems?* **Unit 4: Multiplication and division (1) (10 lessons)** ➤ *What strategies help us multiply and divide larger numbers efficiently?* **Unit 5: Fractions (1) (8 lessons)** ➤ *How do we find equivalent fractions and compare them?* **Unit 6: Fractions (2) (11 lessons)** ➤ *How do we add and subtract fractions with different denominators?*	**Unit 8: Fractions (3) (7 lessons)** ➤ *How do we multiply fractions and find fractions of amounts?* **Unit 9: Decimals and percentages (15 lessons)** ➤ *How do we read, write, and convert between decimals and percentages?* **Unit 10: Measure – perimeter and area (8 lessons)** ➤ *How do we calculate perimeter and area of different shapes?* **Unit 11: Graphs and tables (6 lessons)** ➤ *How do we interpret and draw line graphs and tables?*	**Unit 13: Geometry – position and direction (6 lessons)** ➤ *How do we describe positions and movements on a coordinate grid?* **Unit 14: Decimals (15 lessons)** ➤ *How do we compare, round, and calculate with decimals?* **Unit 15: Negative numbers (4 lessons)** ➤ *What are negative numbers and how do we use them in context?* **Unit 16: Measure – converting units (10 lessons)** ➤ *How do we convert between different units of measure?* **Unit 17: Measure – volume and capacity (3 lessons)** ➤ *How do we estimate and measure volume and capacity?*
Year 6	**Unit 1: Place Value within 10,000,000 (8 lessons)** ➤ *How do we read, write, and compare numbers up to 10 million?* **Unit 2: Four operations (1) (8 lessons)** ➤ *How do we use efficient strategies for all four operations?* **Unit 3: Four operations (2) (12 lessons)** ➤ *How do we solve multi-step problems using all four operations?* **Unit 4: Fractions (1) (9 lessons)** ➤ *How do we simplify, compare, and order fractions?* **Unit 5: Fractions (2) (9 lessons)** ➤ *How do we add, subtract, multiply, and divide fractions?* **Unit 6: Imperial and metric (5 lessons)** ➤ *How do we convert between imperial and metric units?*	**Unit 7: Ratio and proportion (9 lessons)** ➤ *How do we use ratio and proportion to compare quantities?* **Unit 8: Algebra (11 lessons)** ➤ *How do we use symbols and expressions to solve problems?* **Unit 9: Decimals (9 lessons)** ➤ *How do we calculate with decimals and understand their place value?* **Unit 10: Percentages (8 lessons)** ➤ *How do we find percentages of amounts and relate them to fractions and decimals?* **Unit 11: Measure – perimeter, area and volume (11 lessons)** ➤ *How do we calculate perimeter, area, and volume of shapes?*	**Unit 12: Statistics (11 lessons)** ➤ *How do we interpret and construct line graphs and pie charts?* **Unit 13: Geometry – properties of shape (12 lessons)** ➤ *How do we classify and measure angles and shapes?* **Unit 14: Position and direction (5 lessons)** ➤ *How do we describe positions and movements using coordinates?* **Unit 15: Problem solving (14 lessons)** ➤ *How do we apply all our maths skills to solve complex problems?*

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