Mathematics Long-Term Plan 26-27

Parish Church of England Primary School

	Cycle 1 [7 weeks]	Cycle 2 [7 weeks]	Cycle 3 [7 weeks]	Cycle 4 [7 weeks]	Cycle 5 [7 weeks]
Nursery	Colours (2 weeks) Matching (2 weeks) Sorting (2 weeks) Number 1 (1 week)	Numeral 2 - counting and subitising (2 weeks) Patterns (2 weeks) Numeral 3 - Counting and subitising (2 weeks) Numeral 4 - Counting and subitising (1 week)	Numeral 4 - Composition (1 week) Numeral 5- Counting and Subitising (1 week) Numeral 5 - Composition (1 week) Consolidation Numbers 1-5. (1 week) Numeral 6 (1 week) Height and Length (1 week) Mass (1 week).	Capacity (1 week) Sequencing (1 week) Positional Language (1 week) More than/Fewer (1 week) 2D Shape (1 week) 3D Shape (1 week)	Number Composition (1 week) What comes after? (1 week) What comes before? (1 week) Numbers to 5 (1 week) Consolidation (2 weeks)
Reception	Subitising: • Subitise within 3 • Practise using their fingers to represent quantities which they can subitise Cardinality, Ordinality and Counting • Relate the counting sequence to cardinality, seeing that the last number spoken gives the number in the entire set • have a wide range of opportunities to develop their knowledge of the counting sequence, including through rhyme and song • have a wide range of opportunities to develop 1:1 correspondence, including by coordinating movement and counting Composition: • Compose their own collections within 4. Comparison: • Use the language of comparison, including 'more than' and 'fewer than' • Compare sets 'just by looking'	Subitising: • Subitise within 5, perceptually and conceptually, depending on the arrangements. Cardinality, Ordinality and Counting • Continue to develop their counting skills • Explore the cardinality of 5, linking this to dice patterns and 5 fingers on 1 hand • Begin to count beyond 5 • Begin to recognise numerals, relating these to quantities they can subitise and count. Composition: • Explore the concept of 'wholes' and 'parts' by looking at a range of objects that are composed of parts, some of which can be taken apart and some of which cannot Comparison: • Compare sets by matching, seeing that when every object in a set can be matched to one in the other set, they contain the same number and are equal amounts.	Subitising: • Increase confidence in subitising by continuing to explore patterns within 5, including structured and random arrangements • Explore a range of patterns made by some numbers greater than 5, including structured patterns in which 5 is a clear part • experience patterns which show a small group and '1 more' Cardinality, Ordinality and Counting • Continue to develop verbal counting to 20 and beyond • Continue to link counting to cardinality, including using their fingers to represent quantities between 5 and 10 • Order numbers, linking cardinal and ordinal representations of number. Composition: • Explore the composition of 6, linking this to familiar patterns, including symmetrical patterns • begin to see that numbers within 10 can be composed of '5 and a bit' Comparison: • Continue to compare sets using the language of	Subitising: • Explore symmetrical patterns, in which each side is a familiar pattern, linking this to 'doubles' Cardinality, Ordinality and Counting • Continue to consolidate their understanding of cardinality, working with larger numbers within 10 • become more familiar with the counting pattern beyond 20. Composition: • Explore the composition of odd and even numbers, looking at the 'shape' of these numbers • Begin to link even numbers to doubles • Begin to explore the composition of numbers within 10. Comparison: • Compare numbers, reasoning about which is more, using both an understanding of the 'howmanyness' of a number, and its position in the number system.	Subitising: • Continue to practise increasingly familiar subitising arrangements, including those which expose '1 more' or 'doubles' patterns • Use subitising skills to enable them to identify when patterns show the same number but in a different arrangement, or when patterns are similar but have a different number Cardinality, Ordinality and Counting • Continue to develop verbal counting to 20 and beyond, including counting from different starting numbers • Continue to develop confidence and accuracy in both verbal and object counting. Composition: • Explore the composition of 10. Comparison: • Order sets of objects, linking this to their understanding of the ordinal number system.	In this half-term, the children will consolidate their understanding of concepts previously taught through working in a variety of contexts and with different numbers.

			comparison, and play games which involve comparing sets			
	Comparing and ordering Time	2D Shapes Positional language	Measuring lengths and Height Capacity	2D Shapes 3D Shapes	Mass Money	Volume and capacity
Year 1	Maths ELG Retrieval. (1 week).	Chapter 4 – Subtraction Within 10. Number of Scheme Lessons – 6 (2 weeks).	Chapter 7 – Addition and Subtraction Within 20 (Part 2) Number of Scheme Lessons – 7 (1 week).	Chapter 12 – Addition and Subtraction Word Prob (Part 2). Number of Scheme Lessons – 6 (1 week).	Chapter 16 – Time (Part 2). Number of Scheme Lessons – 6 (1 week).	
	Chapter 1 – Counting to 10. Number of Scheme Lessons – 7 (3 weeks).	Chapter 5 – Positions Number of Scheme Lessons – 3 (1 week).	Chapter 8 – Shapes and Patterns. Number of Scheme Lessons – 4 (2 weeks).	Chapter 13 – Division Number of Scheme Lessons – 2 (1 week).	Chapter 17– Money Number of Scheme Lessons – 2 (1 week).	
	Chapter 2 – Number Bonds. Number of Scheme Lessons – 2 (1 week).	Chapter 6 – Numbers to 20. Number of Scheme Lessons – 5 (2 weeks).	Chapter 9 – Length and Height Number of Scheme Lessons – 4 (1 week).	Chapter 14 – Fractions Number of Scheme Lessons – 3 (2 weeks).	Chapter 18 – Volume and Capacity Number of Scheme Lessons – 3 (1 week).	
	Chapter 3 – Addition Within 10. Number of Scheme Lessons – 5 (2 weeks).	Chapter 7 – Addition and Subtraction Within 20 (Part 1) Number of Scheme Lessons – 7 (2 weeks).	Chapter 10 – Numbers to 40. Number of Scheme Lessons – 6 (2 weeks).	Chapter 15: Numbers to 100 Number of Scheme Lessons – 4 (2 week).	Chapter 19 – Mass. Number of Scheme Lessons – 3 (2 weeks).	
			Chapter 11 – Addition and Subtraction Word Prob (Part 1). Number of Scheme Lessons – 6 (1 week).	Chapter 16 – Time (Part 1). Number of Scheme Lessons – 6 (1 week).	Chapter 20 – Space Number of Scheme Lessons – 3 (1 week).	
Times Table Coverage (Delivered through Multiplication Strategy) Mastering Number	Doubling	Counting in 2's	Counting in 10's	Counting in 5's	Start with the oneness of the 1 Times Table then start the 2 Times Tables	
	• Subitise within 5, including when using a rekenrek, and re-cap the composition of 5 • Develop their understanding of the numbers 6 to 9 using the '5 and a bit' structure • Compare numbers within 10 and use precise mathematical language when doing so • Re-cap the order of numbers within 10 and connect this to '1 more' and '1 less' than a given number. • Explore the structure of even numbers (including that even numbers can be composed by doubling any number, and can be composed of 2s) • Explore the structure of the odd numbers as being composed of 2s and 1 more • Explore the composition of each of the numbers 6, 8, and 10 • Explore number tracks and number lines and identify the differences between them		• Explore the composition of each of the numbers 7 and 9 • Explore the composition of odd and even numbers, seeing that even numbers can be made of two odd or two even parts, and that odd numbers can be composed of one odd part and one even part • Identify the number that is two more or two less than a given odd or even number, identifying that two more/ less than an odd number is the next/ previous odd number, and two more/ less than an even number is the next/ previous even number. explore the aggregation and partitioning structures of addition and subtraction through systematically partitioning and re-combining numbers within 10 and connecting this to the part-part-whole diagram, including using the language of parts and wholes • Explore the augmentation and reduction structures of addition and reduction using number stories, including introducing the 'first, then, now' language structure		• Explore the composition of the numbers 11 to 19 as '10 and a bit' and compare numbers within 20 • Connect the composition of the numbers 11 to 19 to their position in the linear number system, including identifying the midpoints of 5, 10 and 15 • Compare numbers within 20 • Understand how addition and subtraction equations can represent previously explored structures of addition and subtraction (aggregation/ partitioning/ augmentation/ reduction). • Practise retrieving previously taught facts and reason about these	
Year 2	Chapter 1 – Numbers to 100 Number of Scheme Lessons – 6 (2 weeks).	Chapter 3 – Multiplication 2s, 5s and 10s Part 2. Number of Scheme Lessons – 10 (2 weeks).	Chapter 5 – Length Number of Scheme Lessons – 8 (2 weeks).	Chapter 13 – Fractions Part 2 Number of Scheme Lessons – 13 (1 week).	Chapter 12 – 3D Shapes Number of Scheme Lessons – 6 (2 weeks).	
	Chapter 2 – Addition and Subtraction Number of Scheme Lessons – 14 (4 weeks).	Chapter 4 – Multiplication/Division of 2,5,10 Number of Scheme Lessons – 8 (3 weeks).	Chapter 6 – Mass Number of Scheme Lessons – 7 (2 weeks).	Chapter 10- Money Number of Scheme Lessons – 10 (2 weeks). 1 week).	Chapter 14 – Time Number of Scheme Lessons – 9 (3 weeks).	
	Chapter 3 – Multiplication 2s, 5s and 10s Part 1. Number of Scheme Lessons – 10 (1 weeks).	Chapter 11 – 2D Shapes. Number of Scheme Lessons – 10 (2 weeks).	Chapter 13 – Fractions Part 1 Number of Scheme Lessons – 13 (3 weeks).	Chapter 7 – Temperature Number of Scheme Lessons – 2 (1 week).	Chapter 15 – Volume Number of Scheme Lessons – 7 (2 weeks).	
				Chapter 8 – Pictograms Number of Scheme Lessons – 5 (1 week).		
				Chapter 9 – Word Problems Number of Scheme Lessons – 4 (1 week).		

Times Table Coverage (Delivered through Multiplication Strategy) Mastering Number	2 Times Tables	5 Times Tables	10 Times Table	2 Times Tables	5 and 10 Times Tables
	• Review the composition of the numbers 6 to 9 as '5 and a bit' • Compare numbers using the language of comparison and use the symbols < > = • Review the structure of even numbers (including exploring how even numbers can be composed of two odd parts or two even parts) and the composition of each of 6, 8 and 10 • Review the structure of odd numbers (including exploring how odd numbers can be composed of one odd part and one even part) and the composition of each of 7 and 9. • Consolidate their understanding of the umbers 10 and 20 as '10 and a bit' • consolidate their understanding of the linear number system to 20 and reason about midpoints	• explore how the numbers 6 to 9 can be doubled using the '5 and a bit' and '10 and a bit' structure • Use doubles to calculate near doubles • Use bonds of 10 to reason about bonds of 20, in which the given addend is greater than 10 • Use known number bonds within 10 to calculate within 20, working within the 10-boundary, use their knowledge of bonds of 10 to find three addends that sum to 10 • Use their knowledge of the composition of numbers within 20 to add and subtract across the 10-boundary • Use their understanding of the linear number system to 10 to position multiples of 10 on a 0 - 100 number line and reason about midpoints	• Continue to explore a range of strategies to subtract across the 10-boundary • Review bonds of 20 in which the given addend is greater than 10, and reason about bonds of 20, in which the given addend is less than 10 • Practise previously explored strategies to support their reasoning about inequalities and equations • Review doubles and near doubles and transform additions in which two addends are adjacent odd/ even numbers into doubles, consolidate previously taught facts and strategies through continued, varied practice	
Year 3	Chapter 1 – Numbers to 1000 Number of Scheme Lessons – 8 (2 weeks).	Chapter 3 – Multiplication and Division Number of Scheme Lessons – 16 (4 weeks).	Chapter 11 – Fractions Number of Scheme Lessons – 15 (4 weeks).	Chapter 7 – Volume Number of Scheme Lessons –10 (2 weeks).	Chapter 12 –Angles Part 2 Number of Scheme Lessons – 6 (1 weeks)
	Chapter 2 – Addition and Subtraction Number of Scheme Lessons – 22 (5 weeks).	Chapter 4 – Further Multiplication Number of Scheme Lessons – 12 (3 weeks).	Chapter 5 – Length Number of Scheme Lessons – 11 (2 weeks).	Chapter 8 – Money Number of Scheme Lessons – 10 (3 weeks).	Chapter 13 – Lines and Shapes Number of Scheme Lessons – 5 (1 week).
			Chapter 6 – Mass Number of Scheme Lessons – 7 (1 week).	Chapter 10 – Picture Graphs and Bar Graphs Number of Scheme Lessons – 4 (1 week).	Chapter 14 – Perimeter of Figures Number of Scheme Lessons – 9 (2 week).
				Chapter 12 –Angles Part 1 Number of Scheme Lessons – 6 (1 weeks)	Chapter 9 – Time Number of Scheme Lessons – 17 (3 weeks).
Times Table Coverage (Delivered through Multiplication Strategy) Mastering Number	3 Times table	4 Times table	8 Times Table	Revise 2, 5 and 10 Times Tables	Revisit 3, 4 and 8 Times table
	• Use the language of 'part' and 'whole' when describing the numbers in a part-part-whole diagram • Secure the language related to addition and subtraction equations: addend; sum; minuend; subtrahend; difference and relate this to the whole and the parts • Write the full set of 8 addition and subtraction equations to match a part-part-whole diagram or bar model • Vary the position of the equals symbol, understanding this as a symbol of equality • Compare part-part-whole diagrams and bar models, understanding that both of these represent the additive relationship between the whole and the parts • Rearrange equations to find missing sums, addends, differences, subtrahends or minuends • Secure their understanding that addition is commutative • Secure their understanding of the composition of 3, 4 and 5, working systematically to find all the ways that these numbers can be composed • Explore the relationship between the addends in a set of facts with the same sum, identifying and explaining the '1 more/1 less' pattern • Apply knowledge of the composition of 3, 4 and 5 to identify when a pair of addends has a given sum • Identify missing addends in addition equations • Identify the difference in subtraction equations, relating this to a missing part/missing addend • Practise recalling addition and subtraction facts within 5 to develop automaticity. Explore the addition table of facts within 10	• Explore the addition table of facts within 10 • Secure their understanding of the composition of each of the numbers 6 to 10 • Connect the composition of 6 to 10 with both addition and subtraction facts • Practise recalling sums and differences to develop automaticity within 10 • Apply additive facts within 10 to addition and subtraction calculations to 100, working within 10s boundaries • Apply additive facts within 10 to addition and subtraction calculations to 100, working with multiples of 10 • Apply a range of generalisation to secure additive facts within 10, then within 20, including: • adding 1 gives 1 more, subtracting 1 gives 1 less • consecutive numbers have a difference of 1 • adding 2 to an even number gives the next even number • subtracting 2 from an even number gives the previous even number • adding 2 to an odd number gives the next odd number • subtracting 2 from an odd number gives the previous odd number • consecutive even numbers have a difference of 2 • consecutive odd numbers have a difference of 2 • when zero is an addend, the sum is equal to the other addend • when zero is the subtrahend, the difference is equal to the minuend	• Explore the addition table of facts across 10 • Secure their understanding of the composition of the numbers 11 to 19 as '10 and a bit' and apply this to addition and subtraction calculations • Use the '5 and a bit' structure to calculate doubles to double 10 • Relate doubles to halves • Practise to develop automaticity with doubles facts, and use these to subtract when the minuend is double the value of the subtrahend • Calculate near doubles by doubling the smaller addend and adding 1 • Calculate near doubles by adding the larger addend and subtracting 1 • Transform addition calculations in which the addends are a pair of adjacent odd numbers, or a pair of adjacent even numbers, into a double (e.g. 7 + 5 = 6 + 6) Practise adding three 1-digit numbers when 2 of the addends sum to 10 • Develop fluency with the strategy of 'making 10' for addition calculations across 10 (adding through 10) • Add 5 to each of 6, 7, 8, and 9, by partitioning the larger addend into '5 and a bit' and 'making 10' with 5 + 5. • Consider different addition strategies for the same calculations, e.g. 7 + 5 = 7 + 3 + 2 (addition through 10) or 7 + 5 = 6 + 6 (transforming a pair of adjacent odd numbers into a double) • Identify the subtraction facts which relate to addition facts across 10 • Subtract by identifying missing addends • Develop fluency with the strategy of 'subtracting through 10' by partitioning the subtrahend into two parts and bridging back through 10	

	• Practise recalling previously-learnt facts (within 5) • Identify odd and even numbers			• Develop fluency with the strategy of 'subtracting from 10' by partitioning the minuend into 10 and a bit and subtracting from 10 • Check subtraction calculations by applying understanding of the additive relationship (checking that the sum of the subtrahend and difference is equal to the minuend) • Compare different subtraction strategies and consider which may be more efficient given the numbers in a calculation • Use knowledge of doubles to subtract when the minuend is double the value of the subtrahend	
Year 4	Chapter 1 – Numbers to 10,000 Number of Scheme Lessons – 13 (4 weeks).	Chapter 3 – Multiplication and Division Number of Scheme Lessons – 19 (4 weeks).	Chapter 4 – Further Multiplication Part 2 Number of Scheme Lessons – 18 (1 week).	Chapter 8 – Decimals Part 2 Number of Scheme Lessons – 9 (1 week).	Chapter 11 – Area and Perimeter of Figures Number of Scheme Lessons – 7 (1 week).
	Chapter 2 – Addition and Subtraction Within 10,000 Number of Scheme Lessons – 16 (3 weeks).	Chapter 4 – Further Multiplication Part 1 Number of Scheme Lessons – 18 (3 weeks).	Chapter 5 - Graphs Number of Scheme Lessons – 5 (1 week).	Chapter 7 – Time Number of Scheme Lessons – 6 (2 weeks).	Chapter 12 – Geometry Number of Scheme Lessons – 9 (3 weeks).
			Chapter 6 – Fractions Number of Scheme Lessons – 13 (3 weeks).	Chapter 9 – Money Number of Scheme Lessons –8 (2 weeks).	Chapter 13 – Position and Movement Number of Scheme Lessons – 5 (2 weeks).
			Chapter 8 – Decimals Part 1 Number of Scheme Lessons – 9 (2 weeks).	Chapter 10 – Length, Mass and Volume Number of Scheme Lessons –8 (2 weeks).	Chapter 14 – Romans Numerals Number of Scheme Lessons – 2 (1 week).
Times Table Coverage (Delivered through Multiplication Strategy)	6 Times table	7 Times table	9 Times table	12 Times table	11 Times table
Mastering Number	• Consider 'many as 1' - seeing that a 'unit' can represent more than 1 • Sort and classify factors and products using multiplicative number sense • recap doubles • recap × 10 and × 5 (connect to halving and doubling) • explore square numbers • use the distributive property to explore the facts in the 11 and 12 times table · use the distributive property to explore the facts in the 9 times table		• sort and classify factors and products using multiplicative number sense • practise retrieving multiplication facts using the oral pattern • know all the core multiplication facts and those related to the 11 and 12 times table • represent the structure of a maths story.		• practise retrieving multiplication facts using the oral pattern • sort and classify factors and products using multiplicative number sense • connect multiplicative contexts to writing and interpreting equations and connect multiplication equations, and multiplication equations with a missing factor, to division, knowing that the product in a multiplication equation is equivalent to the dividend in the corresponding division equation.
Year 5	Chapter 1 – Numbers to 1,000,000 Number of Scheme Lessons – 12 (4 weeks).	Chapter 3 – Whole Numbers: Multiplication and Division Number of Scheme Lessons – 19 (6 weeks).	Chapter 5 – Graphs Number of Scheme Lessons – 7 (2 weeks)	Chapter 7 – Decimals Number of Scheme Lessons – 15 (3.5 weeks)	Chapter 10 – Position and Movement Number of Scheme Lessons – 5 (1 week)
	Chapter 2 – Whole Numbers: Addition and Subtraction Number of Scheme Lessons – 10 (3 weeks).	Chapter 4 – Whole Numbers: Word Problems Number of Scheme Lessons – 4 (1 week)	Chapter 6 – Fractions Number of Scheme Lessons – 18 (5 weeks)	Chapter 8 – Percentages Number of Scheme Lessons – 3 (1.5 week)	Chapter 11 – Measurements Number of Scheme Lessons – 9 (3 weeks)
	Chapter 14 – Roman Numerals Number of Scheme Lessons – 2 (<1 week)			Chapter 9 – Geometry Number of Scheme Lessons – 12 (2 weeks)	Chapter 12 –Area and Perimeter Number of Scheme Lessons – 5 (2 weeks)
					Chapter 13 –Volume Number of Scheme Lessons – 5 (1 weeks)
Times Table Coverage (Delivered through Multiplication Strategy)	3, 6 and 9 Times Tables	7, 11 and 12 Times Tables	Revisit up to 12 x 12	All times tables (supported by Question Level Analysis)	All times tables (supported by Question Level Analysis)
Mastering Number	• Continue to practise retrieving multiplication facts using their oral pattern and focus on those that are less secure • Explore contexts where 1 is a factor • Recap scaling by 10 and then apply to scaling by 100 (creating multiples of 10 and 100 - not looking at decimals) • Applying scaling in the contexts of ratios • Make links between multiplication and division expressions as well as equations in different multiplicative contexts		• Continue to practise retrieving multiplication facts using their oral pattern so that they know all the core multiplication facts • Connect a multiplication and addition equation to a division equation with a remainder • Develop multiplicative number sense through using knowledge of divisibility laws • Sort and classify improper fractions into those that give a whole number quotient and those that do not		• Continue to connect multiplicative contexts to writing and interpreting equations • Apply scaling by 10, 100, 1 10 or 1 100 to known facts • Look at the multiplicative composition of number • Explore expressions with three factors and use brackets, considering how the associative property and commutative property can be used to make calculations easier to solve

	• Write an improper fraction and as a whole number such as 36 6 = 6. The dividend is a multiple of the divisor. • Find a unit fraction of a number to connect the known division fact to scaling down. The dividend is a multiple of the divisor. • Continue to explore multiplicative contexts.				
Year 6	Chapter 1 – Numbers to 10,000,000 Number of Scheme Lessons – 5 (2 weeks).	Chapter 3 –Fractions Part 2 Number of Scheme Lessons – 15 (3 weeks).	Chapter 6 – Word Problems Number of Scheme Lessons - 6 (1.5 weeks).	Chapter 10 – Area and Perimeter Number of Scheme Lessons – 4 (1 week).	Chapter 13 – Position and Movement Number of Scheme Lessons – 10 (2 weeks).
	Chapter 2 – Four Operations Number of Scheme Lessons - 22 (4 weeks)	Chapter 4 - Decimals Number of Scheme Lessons - 14 (3 weeks)	Chapter 7 – Percentages Number of Scheme Lessons - 4 (1.5 weeks)	Chapter 11 –Volume Number of Scheme Lessons – 5 (1 week).	Chapter 14 –Graphs and Averages Number of Scheme Lessons – 11 (3 weeks).
	Chapter 15- Negative Numbers Number of Scheme Lessons – 2 (1 week).	Chapter 5 –Measure Number of Scheme Lessons - 7 (1.5 weeks).	Chapter 8 – Ratio Number of Scheme Lessons - 10 (2 weeks)	Chapter 12 - Geometry Number of Scheme Lessons – 12 (4 weeks).	
	Chapter 3 –Fractions Part 1 Number of Scheme Lessons – 15 (1 weeks).		Chapter 9 – Algebra Number of Scheme Lessons – 10 (2 weeks).		
Times Table Coverage (Delivered through Multiplication Strategy)	All times tables (supported by Question Level Analysis)	All times tables (supported by Question Level Analysis)	All times tables (supported by Question Level Analysis)	All times tables (supported by Question Level Analysis)	All times tables (supported by Question Level Analysis)
Mastering Number	Review Y5 Mastering Number content ensuring children are ready to progress.		Review Y5 Mastering Number content ensuring children are ready to progress.		Review Y5 Mastering Number content ensuring children are ready to progress.

Key Curriculum Features – Number of Scheme Stated Lessons (In addition to White Space):

Year	Number of Lessons — A	Number of Lessons — B	Total Number of Lessons	Number of White Space Days	% of Yearly White Space
1	43	43	86	104	55%
2	60	59	119	71	37%
3	83	65	148	42	22%
4	90	48	138	52	27%
5	70	56	126	64	34%
6	69	68	137	53	28%