Long Term Plan

Mastering Number EYFS				
Strand/ Half-term	**Subitising**	**Cardinality, ordinality and counting**	**Composition**	**Comparison**
1 **Children will:**	• perceptually subitise within 3 • identify sub-groups in larger arrangements • create their own patterns for numbers within 4 • practise using their fingers to represent quantities which they can subitise • experience subitising in a range of contexts, including temporal patterns made by sounds.	• 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 • have opportunities to develop an understanding that anything can be counted, including actions and sounds • explore a range of strategies which support accurate counting.	• see that all numbers can be made of 1s • compose their own collections within 4.	• understand that sets can be compared according to a range of attributes, including by their numerosity • use the language of comparison, including 'more than' and 'fewer than' • compare sets 'just by looking'.
2 **Children will:**	• continue from first half-term • subitise within 5, perceptually and conceptually, depending on the arrangements.	• 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.	• 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 • explore the composition of numbers within 5.	• compare sets using a variety of strategies, including 'just by looking', by subitising and by matching • 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.

Mastering Number EYFS				
Strand/ Half-term	**Subitising**	**Cardinality, ordinality and counting**	**Composition**	**Comparison**
3 **Children will:**	• 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' • continue to match arrangements to finger patterns.	• continue to develop verbal counting to 20 and beyond • continue to develop object counting skills, using a range of strategies to develop accuracy • 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.	• continue to explore the composition of 5 and practise recalling 'missing' or 'hidden' parts for 5 • 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'.	• continue to compare sets using the language of comparison, and play games which involve comparing sets • continue to compare sets by matching, identifying when sets are equal • explore ways of making unequal sets equal.
4 **Children will:**	• explore symmetrical patterns, in which each side is a familiar pattern, linking this to 'doubles'.	• continue to consolidate their understanding of cardinality, working with larger numbers within 10 • become more familiar with the counting pattern beyond 20.	• 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.	• compare numbers, reasoning about which is more, using both an understanding of the 'howmanyness' of a number, and its position in the number system.
5 **Children will:**	• 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 • subitise structured and unstructured patterns, including	• 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.	• explore the composition of 10.	• order sets of objects, linking this to their understanding of the ordinal number system.

Mastering Number EYFS				
Strand/ Half-term	**Subitising**	**Cardinality, ordinality and counting**	**Composition**	**Comparison**
	those which show numbers within 10, in relation to 5 and 10 • be encouraged to identify when it is appropriate to count and when groups can be subitised.			
6	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.			

Mastering Number Year 1					
Strand/ Half-term	**Subitising**	**Cardinality, ordinality and counting**	**Composition**	**Comparison**	**Addition and subtraction/ Number facts**
1 **Children will:**	• revisit subitising within 5 using perceptual subitising • practise conceptual subitising of bigger numbers as they become more familiar with patterns made by the numbers 5–10.	• explore the linear number system within 10, looking at a range of ordinal representations • explore the link between the 'staircase' pattern and a number track.	• focus on the composition of numbers within 10, with a particular emphasis on the composition of numbers 6, 7, 8 and 9 as '5 and a bit', as well as exploring the composition of numbers 5 and 6 in-depth • explore the composition of odd and even numbers, identifying that even numbers are made of 2s and odd numbers have 'an extra 1' – they will link this to the 'shape' of these numbers.		Although children will not be looking at number bonds expressed as equations, their work on the composition of numbers within 10 will be developing their knowledge of number bonds.
2 **Children will:**	• continue to practise conceptually subitising numbers they have already explored the composition of.	• review the linear number system to 10 as they compare numbers.	• continue to explore the composition of the numbers 7–9 in-depth, linking this to their understanding of odd and even numbers • explore the composition of 10, developing a systematic approach to finding pairs that sum to 10.	• revisit what is meant by 'comparing' and see that quantities can be compared according to different attributes, including numerosity.	As above.
3 **Children will:**	• continue to practise conceptually subitising numbers they have already explored the composition of.		• review the composition of numbers within 10, linking these to part-part-whole representations • practise recalling missing parts for numbers within 10.	• compare numbers within 10, linking this to their understanding of the linear system • use the inequality symbol to create expressions, e.g.	• develop their recall of number bonds within 10, through the use of exercises which use written numerals but not the symbols +, – , or =.

Mastering Number Year 1					
Strand/ Half-term	**Subitising**	**Cardinality, ordinality and counting**	**Composition**	**Comparison**	**Addition and subtraction/ Number facts**
				7 > 2, and use the language of 'greater than' and 'less than' • reason about inequalities, drawing on their knowledge of the composition of numbers, e.g. Is this true or false? 3 and 2 is less than 4.	
4 **Children will:**	• continue to practise conceptually subitising numbers they have already explored the composition of.	• review the linear number system to 10, looking at a range of representations, including a number line • explore the use of 'midpoints' to enable them to identify the location of other numbers.	• review the composition of odd and even numbers, linking this to doubles and near doubles • explore the composition of the numbers 11–20, seeing representations which show the structure of these numbers as 'ten and a bit'.		• continue to develop their recall of bonds within 10, through the use of exercises which do NOT involve written equations, such as 4 + 3 = ? • identify doubles and near doubles through visual representations of odd and even numbers.
5 **Children will:**	• continue to practise conceptually subitising numbers they have already explored the composition of. • conceptually subitise numbers within 20 as they become more familiar with the composition of numbers within 20.	• review the linear number system to 20, looking at a range of representations, including a number line • explore the use of 'midpoints' to enable them to identify the location of other numbers.	• continue to explore representations which expose the composition of numbers within 20.	• compare numbers within 20, including questions which use the symbols +, <, >, or =, such as: True or false? 10 + 4 < 14 10 + 4 = 14 10 + 4 > 14	• develop their fluency in additive relationships within 10, using a range of activities and games • draw on their knowledge of the composition of numbers to complete written equations • revisit strategies for addition and subtraction within 10 and apply these to a range of questions,

Mastering Number Year 1					
Strand/ Half-term	**Subitising**	**Cardinality, ordinality and counting**	**Composition**	**Comparison**	**Addition and subtraction/ Number facts**
					including written equations.
6 **Children will:**	• continue to use conceptual subitising, especially when using a rekenrek.		• apply their knowledge of the composition of numbers, to calculations within 10 and 20.	• continue to draw on their knowledge of the relative size of numbers when answering questions using the inequality symbol.	• continue to practise recalling additive facts within 20, applying their knowledge of the composition of numbers within 20 and strategies within 10.

Mastering Number Year 2					
Strand/ Half-term	**Subitising**	**Cardinality, ordinality and counting**	**Composition**	**Comparison**	**Addition and subtraction/ Number facts**
1 **Children will:**	• develop conceptual subitising skills as they become more familiar with patterns made by numbers within 10 and understand their composition • use perceptual and conceptual subitising when using a rekenrek.	• explore the linear number system within 10, looking at a range of representations • compare number tracks and number lines and explore the use of 'midpoints' to enable them to identify the location of other numbers.	• focus on the composition of numbers within 10, with a particular emphasis on the composition of numbers 6, 7, 8 and 9 as '5 and a bit', as well as exploring the composition of numbers 5 and 6 in-depth • explore the composition of odd and even numbers, identifying that even numbers are made of 2s and odd numbers have 'an extra 1' – they will link this to the 'shape' of these numbers.		• link their growing understanding of the composition of numbers within 10 to the related additive facts, including adding 2 to an odd or even number • practise recalling facts in a variety of ways, including through solving simple picture problems and completing equations with a missing sum or addend,
2 **Children will:**	• continue to practise conceptually subitising numbers they have already explored the composition of.	• review the linear number system as they compare numbers.	• continue to explore the composition of the numbers 7–9 in-depth, linking this to their understanding of odd and even numbers	• compare numbers within 10, linking this to their understanding of the linear number system • use the inequality symbols to create expressions, e.g. 7 > 2, and use the language of 'greater than' and 'less than' • draw on their knowledge of number bonds to answer questions in the form: True or false? 5 + 3 > 7	• continue to practise recalling additive facts for numbers within 10, using a range of equations, games and picture problems.
3 **Children will:**	• continue to practise conceptually subitising numbers they have already explored the		• review the composition of 11 to 19 as 'ten and a bit' and explore ways to represent this.		• focus on number bonds within 10 presented in the part-part-whole structure, including identifying a missing 'part' and relating

Mastering Number Year 2					
Strand/ Half-term	**Subitising**	**Cardinality, ordinality and counting**	**Composition**	**Comparison**	**Addition and subtraction/ Number facts**
	composition of, including 'teen' numbers when they have reviewed the composition of 11–19.				this to subtraction equations • review strategies for adding 1 and 2 to odd and even numbers to subtraction facts presented in different ways • apply their knowledge of the composition of 11–19 to calculations in which 10 is a part • apply their knowledge of composition to facts involving 3 addends.
4 **Children will:**	• continue to conceptually subitise the numbers 11–19 using a range of representations, which expose the structure of these numbers as 'ten and a bit'.	• revisit the structure of the linear number system within 20, making links between the midpoints of 5 and 10, and 15.	• review the composition of odd and even numbers, linking this to doubles and near doubles.	• continue to compare numbers within 20, including questions which use the symbols +, <, >, or =, such as: Write the correct symbol: 10 + 4 ☐ 15 10 + 4 ☐ 14 10 + 4 ☐ 13	• draw on their knowledge of the linear number system and apply this to calculations involving 1 more and 1 less, and pairs of numbers with a difference of 1 • use their understanding of the composition of odd and even numbers to find doubles and near doubles • apply known facts to calculations involving larger numbers, e.g. 5 + 2, 15 + 2, 25 + 2.
5	• revisit previous activities which develop	• review the linear number system to 100, applying their knowledge of	• revisit previous activities which develop their understanding of	• reason about equalities and inequalities using	• become fluent in a range of strategies involving calculations within 20,

Mastering Number Year 2					
Strand/ Half-term	**Subitising**	**Cardinality, ordinality and counting**	**Composition**	**Comparison**	**Addition and subtraction/ Number facts**
Children will:	their subitising skills.	midpoints to place numbers on a structured number line – they will identify the multiples of 10 that come before and after a given number.	the composition of numbers within 10 and 20.	equations and answering questions, such as: True or false? 5 + 3 = 6 + 2 9 + 4 > 9 + 5 9 + 6 < 10 + 5 This will help them become fluent in the use of the inequality symbol as well as practising their number bond knowledge.	using 'make 10' strategies to add, and subtracting through the tens boundary • practise recalling number bonds through a range of activities and games which will encourage them to reason about sums and differences.
6 **Children will:**	As above.		As above.		• develop their fluency in additive relationships within 20, using a range of activities and games and revisiting previously taught strategies where necessary.

White Rose Maths	3 weeks	3 weeks	3 weeks	3 weeks
Autumn Term	**Getting to know you**	**Just like me!**	**It's me 1, 2, 3!**	**Light and dark**
Spring Term	**Alive in 5!**	**Growing 6,7,8**	**Building 9 & 10**	**Consolidation**
Summer Term	**To 20 and beyond**	**First, then, now**	**Find my pattern**	**On the move**

Mathematics Curriculum 2023-2024
Year 1 Curriculum Map

	2 weeks	2 weeks	2 weeks	2 weeks	2 weeks	2 weeks
Autumn Term	**Number** **Place value (within 10)** NCETM Y1 U1: Previous reception experiences and counting within 100 NCETM Y1 U2: Comparison of quantities and part-whole relationships NCETM Y1 U3: Numbers 0 to 5 NCETM Y1 U5: Numbers 0 to 10			**Number** **Addition and Subtraction (within 10)** NCETM Y1 U7: Addition and subtraction facts within 10 NCETM Y1 U6: Additive Structures		**Geometry** **Shape** NCETM Y1 U4: Recognise, compose, decompose and manipulate 2D and 3D shapes
Spring Term	**Number** **Place Value (within 20)** NCETM Y1 U8: Numbers to 20	**Number** **Addition and subtraction (within 20)** NCETM Y1 U8: Numbers to 20 NCETM Y1 U6: Additive Structures		**Number** **Place value (within 50)** NCETM Y2 U1: Numbers 10 to 100	**Measurement** **Length and height**	**Measurement** **Mass and volume**
Summer Term	**Measurement** **Money** NCETM Y1 U9: Unitising and coin recognition	**Number** **Multiplication and division** NCETM Y1 U9: Unitising and coin recognition		**Number** **Place value (within 100)** NCETM Y2 U1: Numbers 10 to 100	**Geometry** **Position and direction** NCETM Y1 U10: Position and Direction	**Measurement Time** NCETM Y1 U11: Time

Mathematics Curriculum 2023-2024
Year 2 Curriculum Map

	2 weeks	2 weeks	2 weeks	2 weeks	2 weeks	2 weeks
Autumn Term	**Number** **Place Value** NCETM Y2 U1: Numbers 10 to 100		**Addition and Subtraction** NCETM Y2 U2: Calculations within 20 NCETM Y2 U3: Fluently add and subtract within 10 NCETM Y2 U4: Addition and subtraction of two digit numbers (1) NCETM Y2 U8: Addition and subtraction of two digit numbers (2)		**Geometry** **Shape** NCETM Y2 U7: Shape	
Spring Term	**Measurement** **Money** NCETM Y2 U9: Money	**Number** **Multiplication and division** NCETM Y2 U5: Introduction to Multiplication NCETM Y2 U6: Introduction to Division Structures		**Measurement** **Length and height**	**Measurement** **Mass, capacity and temperature** NCETM Y2 U14: Sense of measure – capacity, volume, mass	
Summer Term	**Fractions** NCETM Y2 U10: Fractions	**Time** NCETM Y2 U11: Time	**Statistics**	**Position and Direction** NCETM Y2 U12 Position and Direction	*Consolidation* **Multiplication and Division** NCETM Y2 U13: Doubling, halving, quotative and partitive division	

Mathematics Curriculum 2023-2024
Year 3 Curriculum Map

	2 weeks	2 weeks	2 weeks	2 weeks	2 weeks	2 weeks
Autumn Term	**Number** **Place Value** NCETM Y3 U2: Number to 1000		**Number** **Addition and Subtraction** NCETM Y3 U1: Adding and subtracting across 10 NCETM Y3 U4: Manipulating the additive relationship and securing mental calculation NCETM Y3 U5: Column addition NCETM Y3 U7: Column subtraction		**Number** **Multiplication and division A** NCETM Y3 U6: 2,4,8 Times tables Launch NCETM times table booklets	
Spring Term	**Number** **Multiplication and division B**		**Measurement** **Length and perimeter**	**Number** **Fractions A** NCETM U8: Unit fractions		**Measurement** **Mass and capacity**
Summer Term	**Number** **Fraction B** NCETM U9: Non-unit fractions	**Measurement** **Money**	**Measurement** **Time** NCETM Y3 U11: Time	**Geometry** **Shape** NCETM Y3 U10: Parallel and perpendicular sides in polygons	**Statistics**	**Geometry** NCETM Y3 U3: Right angles

Mathematics Curriculum 2023-2024
Year 4 Curriculum Map

	2 weeks	2 weeks	2 weeks	2 weeks	2 weeks	2 weeks
Autumn Term	**Number** **Place Value** NCETM U2: Numbers to 10,000		**Number** **Addition and Subtraction** NCETM U1: Review of column addition and subtraction	**Measurement** **Area**	**Number** **Multiplication and Division A** NCETM Y4 U4: 3,6, 9 times table NCETM Y4 U5: 7 times table and patterns	
Spring Term	**Multiplication and Division B** NCETM Y4 U6: Understanding and manipulating multiplicative relationships NCETM Y4 U12: Division with remainders		**Measurement** **Length and perimeter** NCETM Y4 U3: perimeter	**Number** **Fractions** NCETM Y4 U8: Review of fractions NCETM Y4 U9: Fractions greater than 1		**Number** **Decimals A**
Summer Term	**Number** **Decimals B**	**Measurement** **Money**	**Time** NCETM Y4 U11: Time	**Geometry** NCETM Y4 U10: Symmetry in 2D shape	**Statistics**	**Geometry** **Position and direction** NCETM Y4 U7: Co-ordinates

Mathematics Curriculum 2023-2024
Year 5 Curriculum Map

	2 weeks	2 weeks	2 weeks	2 weeks	2 weeks	2 weeks
Autumn Term	**Number** **Place Value**	**Number** **Addition and subtraction**	**Number** **Multiplication and division A** NCETM Y5 U4: Short multiplication and short division		**Number** **Fractions** NCETM Y5 U8: Fractions	
Spring Term	**Number** **Decimals and percentages** NCETM Y5 U1: Decimal fractions NCETM Y5 U2: Money	**Number** **Fractions B** NCETM Y5 U8: Fractions	**Number** **Multiplication and Division B** NCETM Y5 U4: Short multiplication and short division NCETM Y5 U6: Calculating with decimal fractions		**Measurement** **Perimeter and area** NCETM Y5 U5: Area and scaling	**Statistics**
Summer Term	**Geometry** **Shape** NCETM Y5 U7: Factors, multiples and primes	**Geometry** **Position and direction**	**Number** **Decimals**	**Number** **Negative Number** NCETM Y5 U3: Negative numbers	**Measurement** **Converting units** NCETM Y5 U9: Converting units	**Measurement** **Volume**

Mathematics Curriculum 2023-2024
Year 6 Curriculum Map

	2 weeks	2 weeks	2 weeks	2 weeks	2 weeks	2 weeks
Autumn Term	**Number** **Place Value** NCETM Y6 U1: Calculating using knowledge of structures NCETM Y6 U3: Numbers up to 10,000,000	**Number** **Addition and Subtraction, Multiplication and Division** NCETM Y6 U2: Multiples of 1,000 NCETM Y6 U3: Numbers up to 10,000,000 NCETM Y6 U5: Multiplication and division NCETM Y6 U10: Calculating using knowledge of structures NCETM Y6 U12: Order of operations		**Number** **Fractions A** NCETM Y6 U7: Fractions and percentages	**Number** **Fractions B** NCETM Y6 U7: Fractions and percentages	**Measurement** **Converting Units**
Spring Term	**Ratio** NCETM Y6 U9: Ratio and proportion	**Algebra** NCETM Y6 U11: Solving problems with two unknowns **Geometry** NCETM Y5 U10: Angles	**Number** **Decimals**	**Number** **Fractions, decimals and percentages** NCETM Y6 U7: Fractions and percentages	**Measurement** **Area, perimeter, position and volume** NCETM Y6 U6: Area, perimeter, position and direction	**Statistics** NCETM Y6 U8: Statistics NCETM Y6 U13: Mean average
Summer Term	**Geometry** **Shape** NCETM Y6 U4: Draw, compose and decompose shapes	**Geometry** **Position and direction**	**Themed project, consolidation and problem solving**			

Organisation and progression of times tables booklets

From year 3 onwards, children practice their times tables every day to build fluency, accuracy and automaticity. The booklets used in school have been carefully created by the NCETM to reduce cognitive load, build on from known facts and learn times tables systematically. Each child completes a 2-minute times table challenge, ideally twice per day. The challenges are times but children may go over the time if needed; they just record their time using the class timer. This is a low threat, high challenge quiz where children aim to beat their own times and own scores. The booklets are worked through in the following order, to match the order suggested in the National Curriculum Guidance (July 2020)

Booklet A: 10 times table	Booklet F: 3 times table
Booklet B: 5 times table	Booklet G: 6 times table
Booklet C: 2 times table	Booklet H: 9 times table
Booklet D: 4 times table	Booklet I: 7 times table
Booklet E: 8 times table	Booklet J: 11 times table
	Booklet K: 12 times table

Within each booklet there are 22 tests, ordered as follows:

- Tests 1 – 4: First half of the new times table
- Tests 5 – 8: Second half of the new times table
- Tests 9 – 12: All the new times table
- Tests 13 – 22: The new times table combined with previously learnt times tables.

There are two exceptions to this, the 10 times and 11 times table booklets. As these are quicker for children to learn, all the facts are introduced at once rather than split into 'first half' and 'second half' of the times table.

- Children must work through the booklets in the order provided in the table above, otherwise they will meet facts in tests 13 – 22 that they have not yet learnt.
- The NC Guidance explains that the facts it is essential to master in Year 4 to be ready to progress to Year 5 are the facts up to 9 x 9, as these facts are the ones that occur as within column calculations in formal written methods. Therefore, Booklets B – I include facts with multipliers of 2 – 9 only.
- Times tables facts with a factor of 11 and 12 are only introduced in the final 2 booklets, so that most of the time can be spent learning the most essential facts. However, all booklets should be complete so that children are secure in all times tables facts prior to the Year 4 check.
- Facts with a multiplier of 0 and 1 are not included, as these do not need to be learnt in the same was as other facts.
- The 10 times table is of course also essential for progression, and this is learnt in booklet A, and then included in tests 13 – 22 in each of the subsequent booklets.
- About 20% of the facts are expressed as division facts, to give children practice deriving division facts from learnt multiplication facts.