

## Mastering Number: Overview of content – Reception

Strand/ Half-term	Subitising	Cardinality	, ordinality and counting	Composition	Compari	son
1 Children will:	<ul> <li>perceptually subitise v</li> <li>identify sub-groups in arrangements</li> <li>create their own patter numbers within 4</li> <li>practise using their fir represent quantities w subitise</li> <li>experience subitising contexts, including ter made by sounds.</li> </ul>	largercardinality, spoken giv setrns forsetngers to vhich they canhave a wid develop the sequence, songin a range of mporal patternshave a wid develop 1: by coordinationhave oppo 	seeing that the last number	<ul> <li>see that all numbers can be made of 1s</li> <li>compose their own collections within 4.</li> </ul>	<ul> <li>understand that a compared accord of attributes, inclution numerosity</li> <li>use the language comparison, incluthan' and 'fewer</li> <li>compare sets 'ju</li> </ul>	ding to a range uding by their e of uding 'more than'
2 Children will:	<ul> <li>continue from first hal</li> <li>subitise within 5, perc conceptually, depending arrangements.</li> </ul>	eptually and ing on the begin to cc begin to re	e cardinality of 5, linking this terns and 5 fingers on 1 hand bunt beyond 5 cognise numerals, relating uantities they can subitise and	<ul> <li>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</li> <li>explore the composition of numbers within 5.</li> </ul>	<ul> <li>compare sets us strategies, incluc looking', by subit matching</li> <li>compare sets by seeing that when in a set can be m in the other set, f the same numbe equal amounts.</li> </ul>	ling 'just by tising and by matching, n every object natched to one they contain
3 Children will:	<ul> <li>increase confidence in continuing to explore 5, including structured arrangements</li> <li>explore a range of parsone numbers greated including structured p which 5 is a clear part</li> <li>experience patterns w small group and '1 more structured arrangement of the structured arrangement of the structured p which 5 is a clear part</li> </ul>	patterns within20 and beyand random• continue toand random• continue toskills, usingdevelop acer than 5,• continue toatterns in• including uwhich show a• order numl	yond b develop object counting g a range of strategies to	<ul> <li>continue to explore the composition of 5 and practise recalling 'missing' or 'hidden' parts for 5</li> <li>explore the composition of 6, linking this to familiar patterns, including symmetrical patterns</li> </ul>	<ul> <li>continue to comp the language of and play games comparing sets</li> <li>continue to comp matching, identif are equal</li> <li>explore ways of unequal sets equal</li> </ul>	comparison, which involve pare sets by ying when sets making



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	•	continue to match arrangements to finger patterns.		•	begin to see that numbers within 10 can be composed of '5 and a bit'.		
4 Children will:	•	explore symmetrical patterns, in which each side is a familiar pattern, linking this to 'doubles'.	<ul> <li>continue to consolidate their understanding of cardinality, working with larger numbers within 10</li> <li>become more familiar with the counting pattern beyond 20.</li> </ul>	•	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 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.	<ul> <li>continue to develop verbal counting to 20 and beyond, including counting from different starting numbers</li> <li>continue to develop confidence and accuracy in both verbal and object counting.</li> </ul>	•	explore the composition of 10.	•	order sets of objects, linking this to their understanding of the ordinal number system.
6		this half-term, the children will consolida mbers.	te their understanding of concepts previously t	augł	nt through working in a variety o	of cor	ntexts and with different



## Mastering Number: Overview of content – 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.	<ul> <li>explore the linear number system within 10, looking at a range of ordinal representations</li> <li>explore the link between the 'staircase' pattern and a number track.</li> </ul>	<ul> <li>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</li> <li>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.</li> </ul>		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.	<ul> <li>continue to explore the composition of the numbers 7–9 in-depth, linking this to their understanding of odd and even numbers</li> <li>explore the composition of 10, developing a systematic approach to finding pairs that sum to 10.</li> </ul>	• 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.		<ul> <li>review the composition of numbers within 10, linking these to part-part-whole representations</li> <li>practise recalling missing parts for numbers within 10.</li> </ul>	<ul> <li>compare numbers within 10, linking this to their understanding of the linear system</li> <li>use the inequality symbol to create expressions, e.g. 7 &gt; 2, and use the language of 'greater than' and 'less than'</li> </ul>	<ul> <li>develop their recall of number bonds within 10, through the use of exercises which use written numerals but not the symbols +, -, or =.</li> </ul>



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						•	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:	<ul> <li>continue to conceptual numbers th already exp compositio</li> </ul>	ly subitising ney have plored the	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.	٠	review the composition of odd and even numbers, identifying that even numbers are made of 2s and odd numbers have an 'odd 1'.			•	solve a range of subtraction problems using knowledge of part- part-whole relationships. use their understanding of the composition of even and odd numbers to add and subtract 2 to or from odd or even numbers within 10. continue to develop their recall of bonds within 10, through the use of exercises which do NOT involve written equations, such as $4 + 3$ = ?
5 Children will:	<ul> <li>continue to conceptual numbers th already exp compositio</li> <li>conceptual numbers w they becon familiar wit compositio numbers w</li> </ul>	ly subitising hey have blored the n of. ly subitise rithin 20 as he more h the n of	explore 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.	•	explore the composition of the numbers 11–20, seeing representations which show the structure of these numbers as 'ten and a bit'. review the composition of even numbers and focus on doubles.	•	compare numbers within 20 using the inequality symbol.	•	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, including written equations.
6 Children will:	<ul> <li>continue to conceptual especially a rekenrek</li> </ul>	subitising, when using		•	apply their knowledge of the composition of numbers, to calculations within 10 and 20.	•	continue to compare numbers within 20, including questions which use the symbols	•	continue to practise recalling additive facts within 20, applying their knowledge of the composition of numbers

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	+, <, >, or =, such as: True or false? 10 + 4 < 14 10 + 4 = 14 10 + 4 > 14	within 20 and strategies within 10.



## Mastering Number: Overview of content – 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.	<ul> <li>explore the linear number system within 10, looking at a range of representations</li> <li>compare number tracks and number lines and explore the use of 'midpoints' to enable them to identify the location of other numbers.</li> </ul>	•	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.	<ul> <li>review the linear number system as they compare numbers.</li> </ul>	•	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 composition of, including 'teen' numbers when they have reviewed the composition of 11–19.			•	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 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'.	linea with betv	sit the structure of the ar number system in 20, making links ween the midpoints of nd 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, 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.

5 Children will:	<ul> <li>revisit previous activities which develop their subitising skills.</li> </ul>	• review the linear number system to 100, applying their knowledge of midpoints to place numbers on a structured number line – they will identify the multiples of 10 that come before and after a given number.	<ul> <li>revisit previous activities which develop their understanding of the composition of numbers within 10 and 20.</li> </ul>	• reason about equalities and inequalities using 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.	<ul> <li>NCEETAN</li> <li>NATIONAL CENTREFOR EXCELLENCE</li> <li>become fluent in a range of strategies involving calculations within 20, using 'make 10' strategies to add, and subtracting through the tens boundary</li> <li>practise recalling number bonds through a range of activities and games which will encourage them to reason about sums and differences.</li> </ul>
6 Children will:	As above.		As above.		<ul> <li>develop their fluency in additive relationships within 20, using a range of activities and games and revisiting previously taught strategies where necessary.</li> </ul>