Hadlow Primary School

'Happiness, Progress, Success'

Progression in Mastering Number – End of Year Expectations

Overview of content – Reception

Stand/ 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.

Hadlow Primary School

'Happiness, Progress, Success'

Progression in Mastering Number – End of Year Expectations

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 practice 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	• 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.

Hadlow Primary School

'Happiness, Progress, Success'

Progression in Mastering Number – End of Year Expectations

	• be encouraged to identify when it is appropriate to count and when groups can be subitised.			
6	In this term, the children will consolidate their understanding of concepts previously taught through working in a variety of contexts and with different numbers.			

Hadlow Primary School

'Happiness, Progress, Success'

Progression in Mastering Number – End of Year Expectations

Overview of content – Year 1

To be used for starters x2 per week

Strand/ 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 practice 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 practice conceptually subitising numbers they have already explored the composition of.		• review the composition of numbers within 10, linking these to part-part-whole representations	• compare numbers within 10, linking this to their understanding of the linear system	• develop their recall of number bonds within 10, through the use of exercises which use

Hadlow Primary School

'Happiness, Progress, Success'

Progression in Mastering Number – End of Year Expectations

			• practice recalling missing parts for numbers within 10.	• use the inequality symbol to create expressions, e.g. 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.	written numerals but not the symbols +, – , or =.
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, including written equations.

Hadlow Primary School

'Happiness, Progress, Success'

Progression in Mastering Number – End of Year Expectations

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.

Hadlow Primary School

'Happiness, Progress, Success'

Progression in Mastering Number – End of Year Expectations

Overview of content – Year 2

To be used for starters x2 per week

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.

Hadlow Primary School

'Happiness, Progress, Success'

Progression in Mastering Number – End of Year Expectations

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'.	• 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.

Hadlow Primary School

'Happiness, Progress, Success'

Progression in Mastering Number – End of Year Expectations

5 **Children will:**	• revisit previous activities which develop their subitising skills.	• 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.	• revisit previous activities which develop their understanding of the composition of numbers within 10 and 20.	• 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.	• become fluent in a range of strategies involving calculations within 20, 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.