

Mathematics

Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers. By providing frequent and varied opportunities to build and apply this understanding - such as using manipulatives, including small pebbles and ten-frames for organising counting - children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.

EYFS ELGs

ELG: Number

Children at the expected level of development will:

- Have a deep understanding of number to 10, including the composition of each number;
- Subitise (recognise quantities without counting) up to 5;
- Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

ELG: Numerical Patterns

Children at the expected level of development will:

- Verbally count beyond 20, recognising the pattern of the counting system;
- Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity;
- Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

EYFS at Tweseldown Infant School follow the NCETM 'Mastering Number' scheme

Autumn 1	Mastering Number Strand	Number focus	Weekly activities	Relevant Power Maths
Week 1	Initial Assessment			
	<u>Focus</u>	<u>Objectives</u>	<u>The activities this week provide opportunities for children to:</u>	<u>Number blocks Episode</u>
Week 2	1 Subitising	subitise 1 and 2. subitise within 3 make and describe spatial patterns with 3 dots. represent quantities on their fingers in different ways. identify sub-groups of 1, 2 and 3 within larger arrangements.	<ul style="list-style-type: none"> represent the number in a given set using different objects – e.g. showing the same number on their fingers name quantities with number words, (e.g. "I can see 3.") match sets to numerals make their own arrangements that can be subitised. 	Counting to 3: Unit 1: Lessons 1 – 4 (Pages 1-10)
Week 3	2 Counting, cardinality and ordinality	hear and join in with the counting sequence to 5, including using songs and rhymes see that counting is useful because it tells us 'how many' see that the last number in the count tells us 'how many altogether' (cardinality). practise counting each object, action or sound once and only once. experience counting sounds practise counting each object, action or sound once and only once. record the results of their count	<ul style="list-style-type: none"> explore how all sorts of things can be counted, including sounds. Singing counting rhymes will give them opportunities to hear, join in with and develop their knowledge of the counting sequence. 	Episode: 'How to count' 1:1 correspondence Counting to 5: Unit 1: Lesson 9 – 12 (Pages 21 – 30)
Week 4	3 Composition	know that 2 is made of 1 and 'another 1' make their own collections of 2 objects and identify the '1 and another 1' within them. identify when a collection is composed of 3 objects produce their own collection of 3. identify when a collection is composed of 3 or NOT 3 see that 4 can be made with four 1s.	<ul style="list-style-type: none"> subitising small quantities and will use their skills to identify the numbers within 3 and 4. begin to recognise that 3 and 4 can be made by combining sets in different ways. become more fluent in their knowledge of number bonds 	Episode: 'One' 'Just add one' Counting to 4: Unit 1: Lesson 5 – 8 (Pages 11 – 20)
Week 5	4 Subitising	subitise arrangements of 2 and 3 practise making 2s and 3s with their fingers subitise auditory patterns up to 3.	<ul style="list-style-type: none"> make a variety of collections of 3 and 4, which will give them a developing number sense of quantities to 4; this will support them to subitise to 4. 	Episode: 'Two' 'Another one' Counting to 4: Unit 1: Lesson 5 – 8 (Pages 11 – 20)

		<p>identify when a small collection is rearranged or the quantity changed.</p> <p>show small quantities on their fingers</p> <p>use positional language to describe patterns of 4.</p> <p>make patterns showing 4.</p>	<ul style="list-style-type: none"> continue to perceptually subitise and use these skills to help them explore and deeply understand the composition of numbers within 10. 		
Week 6	5 Comparison	<p>represent a given number on their fingers without looking</p> <p>compare 2 sets of objects and say which is 'more than'.</p> <p>represent a given number on their fingers without looking</p> <p>compare 2 sets of objects and say which is 'more than'.</p> <p>compare 2 sets of objects and say which is 'more than' or 'fewer than'.</p> <p>compare 2 sets of objects and say which is 'more than' or 'fewer than'.</p>	<ul style="list-style-type: none"> develop an understanding of increasing quantity. children will learn that quantities cannot always be compared by 'just looking' and they will need to use pairing to compare. Seeing that objects in 2 sets can be matched without any being left over will help draw attention to situations in which quantities are equal. 	<p>Episode: 'Three' 'One Two Three'</p>	<p>Comparing objects: Unit 3: Lesson 1 – 4</p>
Week 7		<p><u>Numerical Patterns</u> Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity</p>		<p>Episode: 'Four' '3 Little Pigs'</p>	<p>Patterns; Unit 12; Week 1/2; Lesson 1 - 4</p>

Autumn 2	Mastering Number Strand	Number focus	Weekly activities		Relevant Power Maths
	Focus	Objectives	The activities this week provide opportunities for children to:	Number blocks Episode	
Week 1	6 Counting, ordinality and cardinality	<p>practise counting each object, action or sound once</p> <p>hear and join in with the counting sequence to 5</p> <p>tag each object with 1 number word (1:1 correspondence)</p> <p>see that they have 5 fingers on one hand.</p> <p>say and make numbers to 5 on their fingers</p> <p>make collections of 5 in different ways.</p> <p>use counters to represent 5 objects</p> <p>use a die frame to represent 5.</p> <p>count 5 and 5 to make 10 altogether.</p>	<ul style="list-style-type: none"> continue to develop their counting skills, organising and counting larger sets of a wide range of objects. count out a set of objects from a larger set, remembering the 'stopping number' and knowing that this means they have selected the correct number. use counting skills in a range of contexts, including counting things that cannot be seen (for example, the number of times a ball is bounced) and using counting to measure time (for example, to play 'hide and seek'). 	<p>Episode: 'Five' 'Stampolines' 'Off we go'</p>	<p>Change within 5 Unit 4; week 7/8; Lesson 1 - 4</p>
Week 2	7 Comparison	<p>practise subitising amounts to 4</p> <p>revisit 'more than' or 'fewer than' by looking.</p> <p>compare groups of up to 3 objects by matching them 1:1</p> <p>say when there is an equal number, too many or not enough.</p> <p>build towers with an equal number of squares</p> <p>match the squares in the towers 1:1</p>	<ul style="list-style-type: none"> compare the number of objects in 2 sets by matching them 1:1. See that objects in some sets can be matched without any being left over will draw the children's attention to instances when the quantities of objects are equal. develop their own 'mental number line' with which to order numbers. 	<p>Episode: 'The Whole of me' 'Six' 'Counting sheep'</p>	<p>Comparing objects: Unit 3: Lesson 1 – 4</p>
Week 3	8 Composition	<p>identify the 'whole' when shown 1 part of a familiar object</p> <p>identify that the parts are still visible when they are assembled to make the whole</p> <p>hear the language of 'whole' and 'parts'.</p> <p>identify parts of their own body</p> <p>recognise that some whole objects have parts that cannot be removed.</p>	<ul style="list-style-type: none"> explore composition by focusing on the preliminary skills: the concept of 'wholes' and 'parts'. By investigating their own bodies and familiar toys they will begin to understand that whole things are often made up of smaller parts and that a whole is, therefore, bigger than its parts. 	<p>Episode: 'Seven' 'Legend of Big Tum'</p>	<p>Part-whole model: Unit 6: Lesson 1 – 4</p>

		<p>identify parts of some animals' bodies</p> <p>investigate ways to compose and de-compose sets of 2 and 3</p> <p>know that 1 and 2 are parts of 3.</p>			
Week 4	9 Composition	<p>investigate ways to compose and de-compose sets of 3</p> <p>explore how 1 and 2 are parts of 3.</p> <p>investigate ways to compose and de-compose 4.</p> <p>use spatial language to describe the shapes</p> <p>explain that different parts can make the same whole.</p> <p>investigate ways to compose and de-compose 5</p>	<ul style="list-style-type: none"> investigate the composition of 3, 4 and 5. Investigate part-part-whole relations, e.g. seeing that 3 can be composed of 1 and 2. recognise that numbers can be made by combining parts in different ways. 	Episode: 'Eight' 'Octoblock to the rescue'	Shape: Unit 11: Week 9; Lesson 1 - 4
Week 5	10 Counting, ordinality and cardinality	<p>hear and join in with the counting sequence to 10, including using songs and rhymes</p> <p>use their fingers to represent quantities to 5 and to begin to represent quantities to 10</p> <p>match different representations of quantities to 5 with amounts shown on their fingers.</p> <p>remember that the 'stopping number' tells us how many we need altogether</p> <p>begin to recognise numerals to 5</p> <p>develop their understanding of equal amounts.</p> <p>represent quantities in more abstract ways, such as by clapping or jumping.</p> <p>begin to understand that when a set of objects is rearranged, its quantity remains the same.</p>	<ul style="list-style-type: none"> find out 'how many' objects there are. revisit the concept of 1:1 correspondence by making sure that they match collections of objects to their representations. develop their understanding of the concept of cardinality – that the last number in the count tells us 'how many' things there are altogether explore verbal counting to larger numbers. Counting together to numbers larger than 20 will begin to expose the pattern of number names beyond the tricky 'teen' numbers. 	Episode: 'Nine' 'Holes'	Change within 5 Unit 4; week 7/8; Lesson 1 - 4
Week 6		<p><u>Numerical Patterns</u> Verbally count beyond 20, recognising the pattern of the counting system</p>		Episode: 'Ten' 'Ten green bottles'	Patterns; Unit 12; Week 1/2; Lesson 1 - 4
Week 7		<p><u>Numerical Patterns</u> Verbally count beyond 20, recognising the pattern of the counting system</p>		Recap 1 - 10	

Spring 1	Mastering Number Strand	Number focus	Weekly activities		Relevant Power Maths
	Focus	Objectives	The activities this week provide opportunities for children to:	Number blocks Episode	
Week 1	11 Subitising	<p>use their fingers to quickly show quantities on 1 hand</p> <p>recognise the numerals 1–5</p> <p>subitise linear and paired arrangements of 2, 3 and 4 dots</p> <p>visualise and recreate arrangements of 3, 4 and 5 dots</p> <p>match arrangements of 3, 4 and 5 dots to the correct numerals.</p> <p>match numerals to quantities for 1–5</p> <p>recognise die arrangements</p> <p>visualise and describe arrangements of dots on a die</p> <p>use dice to link subitised amounts with 1-to-1 counting actions.</p> <p>recognise die patterns to 6</p> <p>link die patterns to numbers shown on their fingers</p>	<ul style="list-style-type: none"> represent quantities in different ways, including by showing amounts on 1 hand 'all at once'. Match numerals to correct quantities use a number track (with numbers placed in equal spaces in ascending order) 	<p>Episode: '11'</p> <p>https://www.youtube.com/watch?v=OVLuYTztH-c</p>	<p>Counting to 5: Unit 1: Lesson 9 – 12 (Pages 21 – 30)</p>
Week 2	12 Counting, ordinality and cardinality	<p>recognise numerals 1–5</p> <p>order numbers from 1–5.</p> <p>match numerals to quantities in order</p> <p>help to build towers in order from 1–5 squares</p> <p>see the staircase pattern and recognise that each number is 1 more.</p> <p>order towers of 1–5 interlocking cubes</p> <p>notice when we have '1 more' and when we do NOT have '1 more'.</p> <p>match numerals to representations</p> <p>represent staircase patterns in different ways, knowing that each new 'step' is 1 more than the last.</p>	<ul style="list-style-type: none"> rehearsing the order of the first 5 numbers and understanding that the position each number holds in our number sequence does not change. investigating the difference in value of consecutive whole numbers. discovering that each number has a value of 1 more than the previous number. 	<p>Episode: '12'</p> <p>https://www.youtube.com/watch?v=iZOdikE3N24 (from 2 mins) arrays (4,4,4)</p>	<p>Counting to 5: Unit 1: Lesson 9 – 12 (Pages 21 – 30)</p>
Week 3	13 Composition	<p>show numbers to 5 using their fingers</p> <p>see that 5 can be partitioned into 4 and 1.</p> <p>see that 5 can be partitioned into 3 and 2.</p> <p>find ways to partition a set of 5.</p> <p>understand that 5 can be partitioned (split) into different parts</p>	<ul style="list-style-type: none"> investigating part–part–whole relations, e.g. seeing that 5 can be made of 3 and 2. deepen their understanding of a 'whole' being made up of smaller parts 	<p>Episode: '13'</p> <p>https://www.dailymotion.com/video/x71eclt_unlucky_13</p>	<p>Part-whole model: Unit 10: Week 7; Lesson 1 - 4</p>

		<p>be able to explain what the parts are</p> <p>use what they know about 5 to work out a hidden number.</p>	<ul style="list-style-type: none"> recognise that numbers can be made by combining parts in different ways make links by considering similarities and differences in the ways of making 5. 		
Week 4	14 Composition	<p>see that there are 5 dots on a die pattern</p> <p>represent 4 in different ways on a die frame.</p> <p>use their fingers to represent 6 as '5 and a bit'</p> <p>use double dice frames to represent 6 as 5 and 1 more.</p> <p>match die representations of numbers 1–6 to representations on their fingers</p> <p>see that 5 and '2 more' make 7.</p> <p>count out 6 blocks from a collection</p> <p>replace 1 block and know that there are still 6</p> <p>add another block to make 7.</p>	<ul style="list-style-type: none"> exploring ways to represent numbers using the Hungarian number pattern (die pattern). exploration of the composition of 5 and its relationships with other numbers. use double dice frames to begin to explore 6 and 7 as numbers that are composed of '5 and a bit'. 	<p>Episode: '14'</p> <p>https://www.dailymotion.com/video/x71egwu</p>	<p>Counting to 6/7/8: Unit 7: Lesson 1 – 4</p>
Week 5	15 Comparison	<p>use 'more than' and 'fewer than' to describe quantities</p> <p>say when they can see that someone has more or fewer of the same kind of object</p> <p>know that it is quantity – not colour – that determines if 1 set has more or fewer of the same type of object than another.</p> <p>use the words 'an equal number' to say when there is the same number of items in 2 sets</p> <p>say when they can see an equal number.</p>	<ul style="list-style-type: none"> focus exclusively on the numerosity of sets, without being diverted by colour, shape or size. notice when quantities are equal or unequal, and will begin to consider how they can manipulate the number of objects in 2 sets to make them equal. Use language of 'more than', 'fewer than' and 'an equal number' to describe how many objects there are in each set. 	<p>Episode: '15'</p> <p>https://www.dailymotion.com/video/x71ej32</p>	<p>Comparing objects: Unit 3: Lesson 1 – 4</p>
Week 6		<p>Numerical Patterns Explore and represent patterns within numbers up to 10, including evens and odds.</p>		<p>Episode: '16'</p> <p>https://www.dailymotion.com/video/x7c9dbg</p>	
Week 7		<p>Numerical Patterns Explore and represent patterns within numbers up to 10, including double facts and how quantities can be distributed equally.</p>		<p>Recap 11 - 16</p>	<p>Doubling: Unit 15: Week 6; Lesson 1</p>

Spring 2	Mastering Number Strand	Number focus	Weekly activities		Relevant Power Maths
	Focus	Objectives	The activities this week provide opportunities for children to:	Number blocks Episode	
Week 1	16 Counting, ordinality and cardinality	<p>practise counting aloud</p> <p>revisit the principles of counting.</p> <p>explore '5 and a bit' ways to make numbers between 6 and 10</p> <p>use generalised statements to describe the '5 and a bit' composition of the numbers 6–8.</p> <p>investigate the '1 more/1 less' pattern of the base-10 counting system</p> <p>begin to order numbers between 1 and 10, noticing the '5 and a bit' structure.</p> <p>describe the '1 more/1 less' relationship of numbers to 10</p> <p>work together to order numbers between 1 and 10, noticing the '5 and a bit' structure.</p>	<ul style="list-style-type: none"> find out 'how many' objects there are by counting. hear, join in with and develop their knowledge of the counting count out a set of objects from a larger set, remembering the 'stopping number' practise counting beyond 20. 	<p>Episode: '17'</p> <p>https://www.dailymotion.com/video/x7ck3c6</p> <p>subtraction</p>	<p>Counting to 9 and 10: Unit 7: Lesson 5-8</p>
Week 2	17 Comparison	<p>subitise arrangements of 6 and NOT 6</p> <p>order Numberblock images to 8.</p> <p>represent 8 as '5 and 3 more'</p> <p>describe how to place the numbers 1 to 8 in order.</p> <p>explain how to order quantities to 10</p> <p>reason about which numbers are 'more than' others.</p> <p>notice when numbers are increased or decreased and explain their thinking.</p>	<ul style="list-style-type: none"> considering where numbers to 8 are in relation to each other. Use the language of 'more than', 'less than' and 'equal to' to describe the relationships between numbers. 'less than' is used instead of 'fewer than' when the focus is on each number's position in the counting sequence. 	<p>Episode: '18'</p> <p>https://www.dailymotion.com/video/x7ck3u3</p>	<p>Counting to 6/7/8: Unit 7: Lesson 1 – 4</p> <p>Counting to 9 and 10: Unit 7: Lesson 5-8</p>
Week 3	18 Composition	<p>use skills of conceptual subitising to describe parts of a whole set</p> <p>visualise arrangements and use gestures to describe the numbers within a whole set.</p> <p>investigate ways of making 7 with two parts</p> <p>use their fingers to make and describe 7 as '5 and 2 more'.</p> <p>notice when towers are made of 7 or NOT 7 interlocking cubes</p>	<ul style="list-style-type: none"> investigating the numbers within 7. investigating part–part–whole relations, e.g. seeing that 7 can be made of 5 and 2. recognise that numbers can be made by combining parts in different ways, and will be encouraged to make links by 	<p>Episode: '19'</p> <p>https://www.dailymotion.com/video/x7ck4ya</p>	<p>Addition: Unit 13; Week 3; Lesson 1 – 4</p>

		<p>work out the missing part of 7 using the '5 and a bit' structure.</p> <p>see that 7 can be composed in different ways</p> <p>explain their understanding of the composition of 7.</p>	<p>considering similarities and differences in the various ways of making 7.</p>		
Week 4	19 Subitising	<p>use conceptual subitising strategies to derive dice patterns to 8</p> <p>use their fingers to show 2 and 4 as doubles.</p> <p>use the language of doubles to describe die/dice patterns</p> <p>see when a pattern is and when it is NOT a double.</p> <p>make doubles patterns using their fingers</p> <p>use objects to make doubles patterns and describe where they can see the pattern of doubles.</p> <p>use positional language to describe spatial arrangements of objects</p> <p>visualise doubles patterns to 5 and 5.</p>	<ul style="list-style-type: none"> • Look carefully at arrangements of dots and then close their eyes to explain what they 'see'. • Use their perceptual subitising skills (seeing the quantity without counting) to build on their understanding of equal amounts • investigate equal groups. • explore doubling quantities to 10. • visualise arrangements. 	<p>Episode: '20'</p> <p>https://www.bbc.co.uk/iplayer/episode/m0006rr5/numberblocks-series-4-11-twenty</p>	<p>Doubling: Unit 15: Week 6; Lesson 1</p>
Week 5	20 Composition	<p>recognise ways in which objects are similar to or different from each other</p> <p>talk about some of the different attributes they notice (colour, size, function, shape, etc.)</p> <p>sort objects according to attributes described by an adult.</p> <p>use their fingers to represent doubles and NOT doubles</p> <p>describe attributes that they notice for a group of objects</p> <p>sort and re-sort objects according to their own attributes.</p> <p>use their fingers to show numbers to 8</p> <p>sort the Numberblocks using the criteria 'odd blocks' or 'even tops'.</p> <p>use their fingers to show doubles patterns</p> <p>describe attributes of the Numberblocks</p>	<ul style="list-style-type: none"> • sort objects according to different criteria. • notice different attributes in groups of objects – such as colour, size or function – and to describe what they notice. • go on to develop their own criteria for sorting. • apply their sorting skills to numbers and will investigate ways to sort the Numberblocks. • practically explore even and odd numbers. • investigate when a number is a double and when it is not. 	<p>Recap 11 – 20</p>	<p>Doubling: Unit 15: Week 6; Lesson 1</p>
Week 6		<p>Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.</p>		<p>Recap Episodes before home time...</p>	<p>Number bonds: Unit 10: Lessons 1 - 4</p>

Summer 1	Mastering Number Strand	Number focus	Weekly activities		Relevant Power Maths
	<u>Focus</u>	<u>Objectives</u>	The activities this week provide opportunities for children to:	Number blocks Episode	
Week 1	21 Cardinality, ordinality and counting	<p>count things that cannot be seen – sounds, actions, periods of time</p> <p>revisit rules for how to count</p> <p>discuss and practise strategies for counting larger sets by moving objects and images</p> <p>make or represent their own collections of larger amounts.</p> <p>practise counting on from a given number</p> <p>discuss and practise strategies for counting larger amounts that cannot be moved.</p>	<ul style="list-style-type: none"> hear, join in with and develop their knowledge of the counting sequence identify missing numbers within it. practise key differences in the number names e.g. between ‘teen’ and ‘-ty’ numbers. develop confidence in counting strategies, including counting on from different starting numbers. consider strategies for counting larger numbers of objects, including those that cannot be moved. 	Recap Episodes 1-20 before home time...	<p>Adding to 10: Unit 9: Lessons 1 – 4</p> <p>Subtraction: Unit 13; Week 4; Lesson 1 – 4</p>
Week 2	22 Subitising	<p>visualise, make and describe spatial arrangements of 6.</p> <p>practise subitising to 6</p> <p>listen to rhythmic patterns of up to 5 sounds and determine the quantity</p> <p>recognise Numberblocks and related doubles patterns on their fingers without counting.</p> <p>subitise doubles amounts shown on 10-frames.</p>	<ul style="list-style-type: none"> understanding of doubles to support their subitising skills move away from counting for sets that can be subitised consider when they can subitise and when they might need to use counting as a strategy. look carefully at structured arrangements, such as those shown on dice and 10-frames, and then to close their eyes and explain what they see. 		<p>Adding to 10: Unit 9: Lessons 1 – 4</p> <p>Subtraction: Unit 13; Week 4; Lesson 1 – 4</p>
Week 3	23 Composition	<p>use their fingers to make doubles patterns</p> <p>consolidate their use of finger patterns to represent numbers within 5.</p> <p>use their fingers to represent numbers within 5, understanding that the ‘whole’ has not changed</p>	<ul style="list-style-type: none"> deepen their understanding of a ‘whole’ being made up of smaller parts through games and practical experiences explore and make links between different, 		<p>Adding to 10: Unit 9: Lessons 1 – 4</p> <p>Subtraction: Unit 13; Week 4; Lesson 1 – 4</p>

		<p>use their own models and/or drawings to explore and represent the numbers within 5.</p> <p>use die frames as a different structure with which to represent the same numbers within 5</p> <p>use spatial language to describe their arrangements.</p> <p>match die frames to ways of making 5</p> <p>explore ways of representing numbers within 5 using 10-frames</p> <p>make links between different representations of numbers within 5.</p>	<p>increasingly abstract, representations of the numbers within 5.</p>		
Week 4	24 Composition	<p>visualise and use spatial language to describe numbers of dots</p> <p>represent the same quantities to 10 using 10-frames and double dice frames.</p> <p>match 10-frames with finger patterns and numerals</p> <p>use structured arrangements to show 10 and 9.</p> <p>begin to explore ways to make 10</p> <p>represent ways to make 10 using structured arrangements.</p> <p>decide when to subitise and when to count quantities</p> <p>represent ways to make 10 using structured arrangements</p> <p>say the different ways that 10 can be made.</p>	<ul style="list-style-type: none"> • deepen their understanding of a 'whole' being made up of smaller parts through games and practical experiences • use their fingers, 10-frames and Hungarian number patterns to begin to explore '5 and a bit' numbers to 10. • investigate part-part-whole relations, e.g. seeing that 7 can be made of 5 and 2 more. 		<p>Adding to 10: Unit 9: Lessons 1 – 4</p> <p>Subtraction: Unit 13; Week 4; Lesson 1 – 4</p>
Week 5	25 Comparison	<p>identify missing numbers in the counting sequence to 10</p> <p>order towers of cubes or number plates from 1–10 on a class number track.</p> <p>match different representations of number to towers (or number plates) on a number track</p> <p>use language to describe positions on a number track.</p> <p>use the language of 'more than' and 'less than' when describing positions on a number track</p> <p>describe and follow the rules for simple, linear track games.</p>	<ul style="list-style-type: none"> • consider where numbers to 10 are in relation to each other. • reason about numbers and think carefully about which is more or less. • Use linear number tracks to play games that encourage them to compare numbers that are far apart, near and next to each other. • make connections between their experiences with counting 1-to-1 and subitising dice patterns • reinforce the order of numbers, and will begin to 		<p>Adding to 10: Unit 9: Lessons 1 – 4</p> <p>Subtraction: Unit 13; Week 4; Lesson 1 – 4</p>

			<p>develop an understanding of the rank order of numerical magnitude (the idea that numbers are getting bigger as we move along the track)</p> <ul style="list-style-type: none">• and of the linear increase in the numbers (the idea that each number on the track is 1 more than the previous number and 1 less than the following number).• counting on from different numbers and support them in continuing to develop their own 'mental number lines'		
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Summer 2	Mastering Number Strand	Number focus	Weekly activities		Relevant Power Maths
	<u>Focus</u>	<u>Objectives</u>	<u>Key Assessment Points</u>	<u>Number blocks Episode</u>	
Week 1	26 Subitising on a rekenrek	<p>subitise numbers up to 5 represented by finger patterns</p> <p>orientate a rekenrek correctly and push a number of beads with one finger.</p> <p>subitise numbers up to 5 using linear dot patterns</p> <p>use 'one finger, one push' to move a number of beads on the top row ALL AT ONCE to the far left of the rekenrek.</p> <p>subitise numbers up to 5 using standard and non-standard dot patterns</p> <p>use 'one finger, one push' to subitise and explore '1 more' patterns of beads on the rekenrek.</p> <p>subitise numbers up to 5 represented on dice frames</p> <p>use 'one finger, one push' to subitise and explore '1 fewer' patterns of beads on the rekenrek.</p>	<p>Are the children able to:</p> <ul style="list-style-type: none"> say the number of up to 4 clearly defined objects in different contexts, without counting? say how many fingers on one hand they can see, quickly and consistently? show amounts on 1 hand, without 'growing' them or counting? (Be considerate of fine motor skills.) recognise a quantity up to 5 in familiar, standard arrangements, such as on a die, a number plate or a 10-frame? correctly say when they have heard 2, 3 or 4 drum beats? describe the 'whole' and groups that they see within unfamiliar arrangements up to 5? (e.g. "I know it's 5 because I can see 4 and 1 more.") <p>NB: The children do not need to be able to count the subitised quantities or to recognise numerals to meet this part of the Early Learning Goal.</p>	Progress to watching episodes beyond 20	Measure: Unit 16; Week 9; Lesson 1 - 4
Week 2	27 Comparison Review and Assess	<p>subitise quantities to 5</p> <p>say which set of up to 10 objects contains more than the other.</p> <p>use their fingers to show 'more than' numbers to 10</p> <p>use rekenreks to push amounts of beads that are equal to, more than and fewer than a given number.</p> <p>subitise '1 more' amounts to 5</p>	<p>Are the children able to:</p> <ul style="list-style-type: none"> look at 2 sets of up to 10 similar objects and say which has more? compare 2 sets of up to 10 objects by looking and/or matching, regardless of the colour, size or type of objects being compared? 		Measure: Unit 16; Week 10; Lesson 1 - 4

		<p>order towers to 10 – recognising the ‘1 more’ pattern of number.</p> <p>use their fingers to show ‘more than’ numbers to 10</p> <p>explore the order and magnitude of numbers to 10.</p>	<ul style="list-style-type: none"> compare 2 sets of up to 10 objects by looking and/or matching, regardless of the spatial arrangements of the objects (i.e. whether they are spread out or close together, etc.)? say when 2 sets have an equal number of objects? make 2 sets that have an equal number of objects? say or demonstrate using practical equipment ‘1 more than’ a number to 9? say or demonstrate using practical equipment ‘1 less than’ a number to 10? begin to develop a ‘mental number line’? Do they know, for example, that 8 is a lot more than 2, but 4 is only a little bit more than 2? <p>NB: The children do not need to be able to read or write numerals or be able to use the greater than, less than or equals symbols to meet this part of the Early Learning Goal.</p>		
<p>Week 3</p>	<p>28 Counting beyond 20 Review and Assess</p>	<p>subitise numbers to 5 and make equivalent amounts with their rekenreks</p> <p>count out 6 or 8 objects from a larger group and check by counting 1-to-1</p> <p>arrange 6 or 8 objects into groups that can be subitised.</p> <p>join in with the counting sequence to 10</p> <p>recognise and show numbers from 5 to 10 in ‘5 and a bit’ arrangements</p> <p>remember to stop when they count to the end of a set of up to 10 jumps/claps/hops.</p> <p>count 20 objects</p> <p>practise saying the tricky ‘teen’ numbers.</p>	<p>Are the children able to:</p> <ul style="list-style-type: none"> join in with counting rhymes and activities, consistently saying the number names in the correct order? tag 1-to-1 for numbers to 10? count a set of up to 10 objects, and then say how many there are altogether, without re-counting? count up to 10 things that can’t be tagged, e.g. jumps/claps, etc.? 		<p>Measure: Unit 16; Week 11; Lesson 1 - 4</p>

		<p>practise counting to 100</p> <p>share strategies for counting larger amounts that can't be moved.</p>	<ul style="list-style-type: none"> count from 1 to 20? apply their counting skills in their play? count from 20 to 29? count from 20 to 35? (Some children may need prompting for the tens numbers, but can then rejoin the count.) <p>NB: The children do not need to understand the place value of larger numbers to meet this Early Learning Goal.</p>	
<p>Week 4</p>	<p>29</p> <p>Patterns within numbers to 10</p> <p>Review and Assess</p>	<p>discuss their understanding of equivalence</p> <p>make and describe doubles arrangements on their fingers.</p> <p>distribute collections of objects into equal and unequal groups</p> <p>sort numbers to 10 according to whether each number is a double / is not a double.</p> <p>use their fingers to make matching doubles amounts</p> <p>make and describe doubles patterns on a rekenrek.</p> <p>recognise an odd and an even number when arranged in a 'doubles' pattern</p> <p>sort models into those that contain odd and those that contain even numbers of interlocking cubes.</p>	<p>Are the children able to:</p> <ul style="list-style-type: none"> look at 2 sets of up to 10 similar objects and say which has more? say when 2 sets of up to 10 similar objects contain an equal number? work with a partner to distribute a quantity of objects to 10 between them? Do they recognise when they have an equal amount? show doubles amounts on their fingers? Can they show and explain a number that is NOT a double? use representations (e.g. interlocking cubes, 10-frames, rekenreks, etc.) to make even and odd numbers? recognise the difference between an odd and an even number? represent a repeating pattern: e.g. 2 red counters, 2 yellow counters, 2 red counters, 2 yellow counters, etc. 	<p>Measurement:</p> <p>Unit 5; Week 8;</p> <p>Lesson 1 - 4</p>

			<p>NB: The children do not need to be able to read or write expressions/equations or to use the addition or equals symbols to meet this Early Learning Goal. They also do not need to be able to recognise an odd or even number from a numeral alone, but can instead use manipulatives to explore or explain why a number is odd or even.</p>	
<p>Week 5</p>	<p>30 Automatic recall Review and Assess</p>	<p>find ways to partition (split) a set of 5</p> <p>understand that 5 can be partitioned in different ways.</p> <p>use what they know about 5 to work out a hidden number.</p> <p>use their fingers to represent numbers within 5</p> <p>use dice frames as a different structure with which to represent the same numbers within 5</p> <p>use spatial language to describe their arrangements.</p> <p>use positional language to describe spatial arrangements of objects</p> <p>visualise and describe doubles patterns up to '5 and 5'.</p>	<p>Are the children able to:</p> <ul style="list-style-type: none"> show numbers to 5 (without counting) on their fingers, using both hands or by using the 'Fingers up, Fingers down' method (see Session 2)? show 10 using both hands, and able to describe another way to make 10? (e.g. 6 and 4, or 9 and 1) show and describe 'doubles patterns' on their fingers? tell you the sum of some doubles within 10? say (when shown a set of up to 5 objects) how many have subsequently been hidden? <p>NB: The children do not need to be able to read or write expressions/ equations or use the addition or equals symbols to meet this Early Learning Goal.</p>	
<p>Week 6</p>	<p>31 Understanding of numbers to 10 Review and Assess</p>	<p>use their fingers to make and describe doubles facts</p> <p>explore and represent the composition of 5 on die frames</p> <p>explore the commutativity of addition facts.</p> <p>explore and represent the composition of 5 on rekenreks</p> <p>use fingers and dice frames to explore and represent '5 and a bit' numbers to 10.</p>	<p>Are the children able to:</p> <ul style="list-style-type: none"> recognise a quantity up to 5 without counting, particularly when arranged in a 'pattern'? split a set of up to 10 objects into 2 parts, recognising that the whole amount remains the same? 	

		<p>use their fingers to represent '1 more than/1 less than' a given number</p> <p>use 10-frames to explore '5 and a bit' numbers to 10.</p> <p>use what they know about the number sequence to work out missing numbers to 10</p> <p>use rekenreks to explore and make '5 and a bit' numbers to 10.</p>	<ul style="list-style-type: none"> • show you 5 automatically, using 2 hands? • tell you the sum of some doubles within 10? • say (when shown up to 5 objects) how many are subsequently hidden by using what they already know and the number of objects that they can still see? • begin to develop a 'mental number line'? Do they know that (e.g.) 8 is a lot more than 2, but 4 is only a little bit more than 2? • recognise and match numerals to quantities up to 10? <p>NB: The children do not need to have automatic recall of all of the number bonds within numbers to 10 to meet this Early Learning Goal.</p>		
<p>Week 7</p>		<p><u>Number</u></p> <ul style="list-style-type: none"> - Have a deep understanding of number to 10, including the composition of each number; - Subitise (recognise quantities without counting) up to 5; - Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts. <p><u>Numerical Patterns</u></p> <ul style="list-style-type: none"> - Verbally count beyond 20, recognising the pattern of the counting system; - Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity; - Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally. 	<p>Planning dependent on needs of the children</p>		