

Early Years



Co-op Academy
Nightingale

Co-op Academy Nightingale
Reception
Early Maths Curriculum

Maths	Reception		
	Baseline/Autumn	Spring/ Summer	ELG
<i>Number - Subitising</i>	Subitise 1-3	Subitise 1-4 (using different spatial and numeric structures)	Subitise (recognise quantities without counting) up to 5;
<i>Number - Composition</i>	Uses the language of and can identify 'whole' and 'parts' Knows number combinations to 5. Names parts of any whole, or the whole given the parts. Begin to find all double facts up to double 3	Knows number combinations to totals of 7. Names parts of any whole, or the whole given parts. Begin to learn number bonds to 5, including double facts	Have a deep understanding of number to 10, including the composition of each number; Automatically recall (without reference to rhymes, counting or other aides) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts;
<i>Numerical Pattern - Counting system</i>	Count forwards and backwards within the number sequence 1 to 5 Accurately counts objects in a line to 5. Answers "how many" questions with the last number counted, understanding that this represents the total (the cardinal principle).	Recognises, says and identify numerals 1 to 5 and begin to select the correct numeral to represent objects to 10 Counts with 1:1 correspondence a set of up to 10 objects Place numbers 1 to 10 in the correct numerical order beginning to state the number just after or just before. Verbal counting to 20 is developing.	Verbally count beyond 20, recognising the pattern of the counting system;
<i>Numerical Pattern - Comparing quantities</i>	Uses the language of 'more', 'fewer' and 'less' to compare two sets of objects up to 5. Identifies equal groups of objects by subitising Shows one more/one less than 5 using concrete objects	Uses the language of 'more', 'fewer' and 'less' to compare two sets of objects up to 10 and identify which number is one more or one less than a given number to 10. Compare groups of objects when there is variation in size. Begins to use the language of greater than, less than and the same to compare two sets of objects	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 style="text-align: center;"><i>Numerical Pattern - Pattern within Number</i></p>	<p>Explore ways of making doubles using manipulatives</p> <p>Understands the relationship between equal groups and finding doubles</p>	<p>Solves small-number multiplying problems by grouping. Solves division/sharing problems, using concrete objects</p> <p>Understands the relationship between sharing into two equal groups and finding half</p> <p>Shares an even number of concrete objects in two equal groups and Exploring patterns, begins to see the link between doubles and halves</p> <p>Explore all even/odd numbers up to 10 and understands that all even numbers can be shared equally and that all odd numbers can not be shared equally</p>	<p>Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.</p>
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Maths - Assessment & Curriculum

[W EYFS Reception White Rose Maths Overview.docx](#)

[PDF 10-24 EY AOL progression N>R.pdf](#)

Co-op Academies Trust Maths	Nursery Progression: Baseline / Autumn		Nursery Progression: Spring / Summer		Reception Progression: Baseline / Autumn		Reception Progression: Spring / Summer		Reception Progression: ELO	
	MATHS		MATHS		MATHS		MATHS		MATHS	
	Number		Number		Number		Number		Number	
	<p>Name groups of 1, 2 and 3.</p> <p>Recognises small groups without counting.</p> <p>Joins in with finger rhymes representing number.</p> <p>Explores songs & rhymes that involve splitting and recombining amounts to make the same total.</p>		<p>Begin to subdivide small quantities (recognise quantities without counting).</p> <p>Show finger numbers up to 5.</p> <p>Explore composition to 5 by partitioning and recombining sets.</p>		<p>Subitise 1-5</p> <p>Uses the language of and can identify 'whole' and 'part'.</p> <p>Knows number combinations to 5.</p> <p>Name parts of any whole, or the whole given the parts.</p> <p>Begin to find all double facts up to double 3.</p>		<p>Subitise 1-5 (using different spatial and numeric structures).</p> <p>Knows number combinations to totals of 7.</p> <p>Name parts of any whole, or the whole given parts.</p> <p>Begin to learn number bonds to 5, including double facts.</p>		<p>Subitise (recognise quantities without counting) up to 5.</p> <p>Have a deep understanding of number to 10, including the composition of each number.</p> <p>Automatically recall number reference to rhymes, counting or other tasks.</p> <p>Number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.</p>	
	Numerical Pattern		Numerical Pattern		Numerical Pattern		Numerical Pattern		Numerical Pattern	
<p>Connect some number names with an object.</p> <p>Begin to count objects by saying one number name for each item.</p> <p>Shows an interest in numerals in the environment of personal significance.</p> <p>Compares two groups of objects, saying when they have the same number.</p> <p>Compares collection 1-4 where objects are the same.</p> <p>Explores finding one more/one less through songs, rhymes and games.</p> <p>Shares by "loading out" (usually only between 2 people).</p> <p>Makes small groups and may begin to recognise equal groups of small quantities using the language same.</p>		<p>Recognises, says and identifies numerals 1 to 3.</p> <p>Recites numbers to 10.</p> <p>Develops accurate one-to-one correspondence for small groups of objects when in line.</p> <p>Compares collections up to 5 using the language of 'more'/'less'.</p> <p>Understand the 'one more than/one less than' relationship between consecutive numbers.</p> <p>Makes small equal groups (fewer than 5).</p>		<p>Count forwards and backwards within the number sequence 1 to 5.</p> <p>Accurately counts objects in a line to 5.</p> <p>Answers "how many" questions with the last number counted, understanding that this represents the total (the cardinal principle).</p> <p>Uses the language of 'more', 'fewer' and 'less' to compare two sets of objects up to 5.</p> <p>Identifies equal groups of objects by subitising.</p> <p>Solves one more/one less than 5 using concrete objects.</p> <p>Explores ways of making doubles using manipulatives.</p> <p>Understands the relationship between equal groups and finding doubles.</p>		<p>Counts with 1:1 correspondence a set of up to 10 objects.</p> <p>Place numbers 1 to 10 in the correct numerical order beginning to state the number just after or just before.</p> <p>Verbal counting to 20 is developing.</p> <p>Uses the language of 'more', 'fewer' and 'less' to compare two sets of objects up to 10 and identify which number is one more or one less than a given number to 10.</p> <p>Compare groups of objects when there is variation in size.</p> <p>Begin to use the language of greater than, less than and the same to compare two sets of objects.</p> <p>Solves small number multiplying problems by grouping. Solves division/sharing problems, using concrete objects.</p> <p>Understands the relationship between sharing into two equal groups and finding half.</p> <p>Shares an even number of concrete objects in two equal groups and Exploring patterns, begins to see the link between doubles and halves.</p> <p>Explores all even/odd numbers up to 10 and understands that all even numbers can be shared equally and that all odd numbers can not be shared equally.</p>		<p>Verbally count beyond 20, recognising the pattern of the counting system.</p> <p>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>Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.</p>		

LTP Overview - Reception

	Autumn 1								Half Term	Autumn 2					
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8		Week 1	Week 2	Week 3	Week 5	Week 6	Week 7
Phase	Baseline Settling in	Just like me: Match and sort and compare amounts Talk about Measures and Patterns.				It's me! 1 2 3!: Representing, comparing and composition of 1 2 3. Circles and triangles.				1, 2, 3, 4, 5			Shapes with 4 sides	Consolidation	
Concepts & objectives	Baseline Settling in	<u>Week 2 & 3 - Match and Sort and compare</u> <ul style="list-style-type: none"> - To find and match objects which are the same - To identify and talk about attributes that are the same and those that are different. - To identify how items have been sorted based on their attributes. - To sort objects into groups based on their attributes. - To identify the sorting rule based on different attributes. <u>Week 4 & 5: Talk about measure and pattern</u> <u>Week 4 - Compare size, mass</u>				<u>Week 6 - Representing 1 2 3:</u> <ul style="list-style-type: none"> - To identify representations of one, two and three - To accurately count objects to 3 - To subitise 1 to 3 - Recognises, says and identifies numerals 1 to 3. - To understand the last number counted represents the total <u>Week 7 - Comparing 1 2 3:</u> <ul style="list-style-type: none"> - Uses the language of 'more', 'fewer' and 'less' to compare two sets of up to 3 objects - Identifies equal groups of objects by subitising - Identifies counting on one is one more than the number before - Identify counting back one is one less than the previous number - Finds one more/one less up to 3 using concrete objects <u>Week 8 - Composition of 1,2,3:</u> <ul style="list-style-type: none"> - Knows number combinations to 3 - Uses the language of and can 				<u>Week 1 & 2 - Representing numbers to 5</u> <ul style="list-style-type: none"> - To identify representations of four and five - Count forwards and backwards within the number sequence 1 to 5 - To accurately count objects to 5 - To subitise 1 to 5 - Recognises, says and identifies numerals 1 to 5. - To understand the last number counted represents the total - Represent 5 in a five frame and know there are five when it is full. <u>Week 3 - One more and one less</u> <ul style="list-style-type: none"> - Uses the language of 			<u>Week 4 & 5 Shapes with 4 sides:</u> -Recognise that squares and rectangles of different sizes and orientations have four straight sides and four corners -Recognise squares and rectangles in their environment.		<u>Week 6 & 7</u> Add objectives to reflect gaps in learning and plan accordingly

	<p><u>and capacity:</u></p> <ul style="list-style-type: none"> - To compare and order items by size. - To compare the mass of objects - To compare the capacity of objects. <p><u>Week 5 - Exploring patterns:</u></p> <ul style="list-style-type: none"> - To explore simple repeating pattern. - To copy and continue a repeating pattern. - To create a simple repeating pattern. 	<p>identify 'whole' and 'parts'</p> <ul style="list-style-type: none"> - Names parts of any whole, or the whole given the parts up to 3 <p><u>Week 9 - Circles and triangles:</u></p> <ul style="list-style-type: none"> - To identify a circle and triangle - To know some of the features of a circle and triangle. - To recognise circles and triangles in the environment 	<p>'more', 'fewer' and 'less' to compare two sets of up to 5 objects</p> <ul style="list-style-type: none"> - Finds one more/one less up to 5 using concrete objects - Count forwards and backwards within the number sequence 1 to 5 - To accurately count objects to 5 - To subitise 1 to 5 - Recognises, says and identifies numerals 1 to 5. - 		
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	Spring 1					Half term	Spring 2								
	Week 1	Week 2	Week 3	Week 4	Week 5		Week 1	Week 2	Week 3	Week 4	Week 5				
Phase	Alive in 5!: introducing zero, comparing numbers to 5 and composition of 4 and 5. Compare mass and capacity.					Growing 6 7 8: combining 2 groups and making pairs.					Length, height and time. Building 9 & 10: Counting to 9 & 10, comparing numbers to 10 and bonds to 10 3D shapes and pattern				
Concepts & objectives	<p><u>Week 1 - Introducing Zero:</u></p> <ul style="list-style-type: none"> - Recognise and identify representations of zero - Find, subitise and represent 0-5 <p><u>Week 2 - Comparing numbers to 5:</u></p> <ul style="list-style-type: none"> - Uses the language of 'more', 'fewer' and 'less' to compare two sets of up to 5 objects - Identifies equal groups of objects by subitising <p><u>Week 3 - Composition of 4 and 5</u></p> <ul style="list-style-type: none"> - Uses the language of and can identify 'whole' and 'parts' - Knows number combinations to 5. - Names parts of any whole, or the whole given the parts. - To accurately count objects to 5 					<p><u>Week 5 - 6, 7 and 8:</u></p> <ul style="list-style-type: none"> - Recognises, says and identify numerals 1 to 8 - Counts with 1:1 correspondence a set of up to 8 objects - Knows number combinations to totals of 7. - Names parts of any whole, or the whole given parts. <p><u>Week 6 - Making pairs:</u></p> <ul style="list-style-type: none"> - To recognise that a pair is two. - To arrange small quantities into pairs - Identify that some quantities will have an odd one out. <p><u>Week 6 - Comparing 2 groups:</u></p> <ul style="list-style-type: none"> - To combine 2 groups to find how many altogether. - Names parts of any whole, or the whole given parts. - 					<p><u>Week 1 - Length and height:</u></p> <ul style="list-style-type: none"> - To use language to describe length and height - To make comparisons of objects using units of non standard measure (cubes) <p><u>Week 1- Time:</u></p> <ul style="list-style-type: none"> - To name the days of the week - To discuss the events that happen in their week <p><u>Week 2 - Counting to 9 and 10:</u></p> <ul style="list-style-type: none"> - Selects the correct numeral to represent objects to 10 - Count forwards and backwards within the number sequence 1 to 10 - Counts with 1:1 correspondence a set of up to 10 objects <p><u>Week 3 - Comparing numbers to 10:</u></p> <ul style="list-style-type: none"> - Selects the correct numeral to represent objects to 10 - Counts with 1:1 correspondence a set of up to 10 objects - Uses the language of 'more', 'fewer' and 'less' to compare two sets of up to 10 objects <p><u>Week 4 - Bonds to 10:</u></p> <ul style="list-style-type: none"> - explore number bonds to 10 using real objects. <p><u>Week 5 - 3D shape:</u></p> <ul style="list-style-type: none"> - Explore and manipulate 3D shapes - Identify which 3D shapes stack or roll 				

	<ul style="list-style-type: none"> - To subitise 1 to 5 <p><u>Week 4 - Compare mass:</u></p> <ul style="list-style-type: none"> - To use mathematical language, such as heavy, heaviest, light or lightest when making direct comparisons between objects. <p><u>Week 5 - Compare capacity:</u></p> <ul style="list-style-type: none"> - To recognise when a container is full, nearly full, half full, nearly empty or empty. 		<ul style="list-style-type: none"> - Build using a variety of 3D shapes -
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	Summer 1						Summer 2							
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Phase	Consolidation	To 20 and beyond: building numbers beyond 10 and counting patterns beyond 10. Spatial reasoning, match, rotate and manipulate.		Manipulate, compose and decompose.			Find my pattern: doubling, sharing and grouping and even and odd. Spatial reasoning, visualise and build.				Visualise, build and map		Make Connections & Consolidation	
Concepts & objectives	<u>Week 1 - Consolidation</u> Add objectives to reflect gaps in learning and plan	<u>Week 2 - Building Numbers Beyond 10: Counting patterns beyond 10:</u> - Place numbers 1 to 10 in the correct		<u>Week 4 - Adding More:</u> - Have a deep understanding of number to 10, including the composition of each number			<u>Week 7 - Doubling:</u> - Explore ways of making doubles using manipulatives - Understands the relationship between equal groups and finding doubles <u>Week 1 - Sharing and grouping:</u> - Understands the relationship between sharing				<u>Week 4 - Deepening Understanding</u> - solve problems and find different possibilities		<u>Week 6 & 7 - Consolidation</u> - Add objectives to reflect gaps in	

	accordingly	<p>numerical order beginning to state the number just after or just before.</p> <ul style="list-style-type: none"> - To verbally count beyond 20 - To recognise numbers 1-9 repeat as a number pattern. - To recognise representations of numbers to 20 <p><u>Week 3 - Spatial reasoning:</u></p> <ul style="list-style-type: none"> - To explore different orientations and arrangements of shapes - To use positional language to describe the position of shapes in different arrangements 	<ul style="list-style-type: none"> - Counts with 1:1 correspondence a set of up to 10 objects - To use the first, then, now structure to say an 'adding more' number story. <p><u>Week 5 - Taking away</u></p> <ul style="list-style-type: none"> - Have a deep understanding of number to 10, including the composition of each number - Counts with 1:1 correspondence a set of up to 10 objects - To use the first, then, now structure to say a 'taking away' number story <p><u>Week 6- Spatial reasoning</u></p> <ul style="list-style-type: none"> - Explore how shapes can be combined, separated and arranged to make new shapes. <p><u>Week 6 - Consolidation</u></p> <ul style="list-style-type: none"> - Add objectives to reflect gaps in learning and plan accordingly 	<p>into two equal groups and finding half</p> <ul style="list-style-type: none"> - Shares an even number of concrete objects in two equal groups - Explores patterns and begins to see the link between doubles and halves <p><u>Week 2 - Even and odd:</u></p> <ul style="list-style-type: none"> - Explore all even/odd numbers up to 10 and understands that all even numbers can be shared equally and that all odd numbers can not be shared equally <p><u>Week 3 - Spatial reasoning:</u></p> <ul style="list-style-type: none"> - To use positional language to describe where objects are in relation to other items. - To build models using 3D shapes. <p><u>Week 3 - Consolidation</u></p> <ul style="list-style-type: none"> - Add objectives to reflect gaps in learning and plan accordingly 	<p>s and explain their reasoning</p> <p><u>Week 5 - Patterns and relationships</u></p> <ul style="list-style-type: none"> - copy, continue and create complex repeating patterns. - create a symmetrical arrangement <p><u>Week 5 - Spatial Mapping</u></p> <ul style="list-style-type: none"> - create a map and describe a simple route. 	learning and plan accordingly
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Mastering Number

Reception Overview

Term 1	Term 2	Term 3
<p>Pupils will build on previous experiences of number from their home and nursery environments, and further develop their subitising and counting skills. They will explore the composition of numbers within 5. They will begin to compare sets of objects and use the language of comparison.</p> <p>Pupils will:</p> <ul style="list-style-type: none"> • identify when a set can be subitised and when counting is needed • subitise different arrangements, both unstructured and structured, including using the Hungarian number frame • make different arrangements of numbers within 5 and talk about what they can see, to develop their conceptual subitising skills • spot smaller numbers 'hiding' inside larger numbers 	<p>Pupils will continue to develop their subitising and counting skills and explore the composition of numbers within and beyond 5. They will begin to identify when two sets are equal or unequal and connect two equal groups to doubles. They will begin to connect quantities to numerals.</p> <p>Pupils will:</p> <ul style="list-style-type: none"> • continue to develop their subitising skills for numbers within and beyond 5, and increasingly connect quantities to numerals • begin to identify missing parts for numbers within 5 • explore the structure of the numbers 6 and 7 as '5 and a bit' and connect this to finger patterns and the Hungarian number frame • focus on equal and unequal groups when comparing numbers 	<p>Pupils will consolidate their counting skills, counting to larger numbers and developing a wider range of counting strategies. They will secure knowledge of number facts through varied practice.</p> <p>Pupils will:</p> <ul style="list-style-type: none"> • continue to develop their counting skills, counting larger sets as well as counting actions and sounds • explore a range of representations of numbers, including the 10-frame, and see how doubles can be arranged in a 10-frame • compare quantities and numbers, including sets of objects which have different attributes • continue to develop a sense of magnitude, e.g. knowing that 8 is quite a lot more than 2, but 4 is only a little bit more than 2

<ul style="list-style-type: none"> • connect quantities and numbers to finger patterns and explore different ways of representing numbers on their fingers • hear and join in with the counting sequence, and connect this to the 'staircase' pattern of the counting numbers, seeing that each number is made of one more than the previous number • develop counting skills and knowledge, including: that the last number in the count tells us 'how many' (cardinality); to be accurate in counting, each thing must be counted once and once only and in any order; the need for 1:1 correspondence; understanding that anything can be counted, including actions and sounds • compare sets of objects by matching • begin to develop the language of 'whole' when talking about objects which have parts 	<ul style="list-style-type: none"> • understand that two equal groups can be called a 'double' and connect this to finger patterns • sort odd and even numbers according to their 'shape' • continue to develop their understanding of the counting sequence and link cardinality and ordinality through the 'staircase' pattern • order numbers and play track games • join in with verbal counts beyond 20, hearing the repeated pattern within the counting numbers 	<ul style="list-style-type: none"> • begin to generalise about 'one more than' and 'one less than' numbers within 10 • continue to identify when sets can be subitised and when counting is necessary • develop conceptual subitising skills including when using a rekenrek
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