Nursery -			
Term	What we are learning:	What a child might be doing: (Birth to 5 Matters)	Vocabulary:
Spring	Baseline	-	-
	Spatial Awareness/ Positional Language	Moves their bodies and toys around objects and explores fitting into spaces	'that goes in there' 'it fits' 'I can fit in there' 'I can squeeze in'
		Begins to remember their way around familiar environments	'the toilets are over there' 'we have snack here'
	Shape	Chooses puzzle pieces and tries to fit them in	'that one goes in there'
	Counting	Begins to say numbers in order, some of which are in the right order (ordinality)	Number names 1-2-3-5 etc.
	Pattern	Joins in and anticipates repeated sound and action patterns	E.g. Heads, shoulders, knees and toes
	Measure	Beginning to anticipate times of the day such as mealtimes or home time	'It is home time soon' 'I'm hungry, is it snack time?'

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Summer	Spatial	Responds to	Can you jump up?
	Awareness/	some spatial	Can you sit down?
	Positional	and positional	
	Language	language	
		Explores how	'Look at that', 'it is in the sky'
		things look	
		from different	
		viewpoints	
		-	
		including	
		things that are	
		near or far	
		away	
	Shape	Recognises	'They look the same'
		that two	
		objects have	
		the same	
		shape	
		Makes simple	'l'm building a
		constructions	castle/house/boat/zoo/park/car/train'
		constructions	-
			etc.
	Counting	Cardinality	'I'm going to have 2 grapes for snack'
		(how many) –	
		in everyday	
		situations,	
		takes or gives	
		two or three	
		objects from a	
		group	
		Beginning to	'That's my number'
		notice	'That's on my front door'
		numerals	
		(number	
		•	
		symbols)	
		Designation	One two three
		Beginning to	One, two, three
		count on their	
		fingers	
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Comparing Quantities and Numbers	Beginning to compare and recognise changes in numbers of things, using words like <i>more, lots</i> or <i>'same'</i>	More, lots, same
Pattern	Is interested in what happens next using the pattern of everyday routines	'Is it lunch time now?'
Measure	Explores differences in size, length, weight and capacity	Big, small, bigger, little, smaller, high, low, tall, heavy
	Beginning to understand some talk about immediate past and future	'I did that on another day' 'Can I do that on another day?'

Nursery –	Mathematics		
Term	What we are learning: (Development Matters)	What a child might be doing: (Birth to 5 Matters)	Vocabulary:
Autumn	Baseline	-	-
	Counting Reciting numbers up to 3. Say one number for each item in order: 1, 2, 3	May enjoy counting verbally. Points or touches (tags each item) saying one number for each item. Use the stable order of 1, 2, 3 Uses some number names and number language within play	One, two, three
	Mark Making Experiment with their own symbols and marks.	Explores using a range of their own marks and signs to which they ascribe mathematical meanings.	One, two, three, lines, dots
	Shape Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc.	Chooses items based on their shape which are appropriate for the child's purpose.	Flat, pointy, rolly, brick, round
	Subitising Develop fast recognition of up to 3 objects without having to count them individually (Begins here but should be present throughout Nursery).	Subitises 1, 2 & 3 objects (without counting).	One, two, three, all of them
	Linking Numerals and Amounts Link numerals and amounts: for example, showing	Links numerals with amounts up to 3 and maybe beyond (cardinality).	One, two, three, how many, matching, the same, not that one

	the right number of objects to match the numeral up to 3. Positional Language Understand position through words alone	Responds to and uses language of position and direction. Uses spatial words in play.	In, on, up, down
	Pattern Talk about and identify the patterns around them. Use informal language to	Talk about spatial patterns showing some organization or regularity.	Stripes on clothes, design on rugs, displays, Pointy, spotty, blobs
	describe patterns Measure Make comparisons between objects relating to size.	In meaningful contexts finds the bigger or smaller of two items.	Bigger/smaller
	Problem solving and Composition of Numbers Solve real world mathematical problems with numbers up to 2.	Through play and exploration, beginning to learn that numbers are made up (composed) of smaller numbers. Beginning to use understanding of number to solve practical problems in play and meaningful activities.	One & two, one & one, put them together, how many?
Spring	Counting Reciting numbers up to 5.	May enjoy counting verbally as far as they can go.	One, two, three, four, five
	Say one number for each item in order: 1, 2, 3, 4, 5 Show 'finger numbers' up to 5.	Points or touches (tags each item) saying one number for each item. Use the stable order of 1, 2, 3, 4, 5	One after the other, fingers

Cardinal Principle – know that the last number reached when counting a small set of objects tells you how many there are in total Comparing Quantities and Numbers Compare quantities using language: 'more than', 'fewer than'. Shape Combine shapes to make new ones – an arch, a bigger triangle etc.	Counts up to 5 items recognising that the last number said represents the total counted so far. Compares two small groups of up to 3 objects, saying when there are the same number of objects in each group e.g. you've got 2, I've got 2'. Same! Attempts to create arches and enclosures when building, using trial and improvement	5 altogether More than, fewer than, same, different Does it fit? Shape, right shape, wrong shape, triangle,
Quantities and Numbers Compare quantities using language: 'more than', 'fewer than'. Shape Combine shapes to make new ones – an arch, a bigger	groups of up to 3 objects, saying when there are the same number of objects in each group e.g. you've got 2, I've got 2'. Same! Attempts to create arches and enclosures when building, using	than, same, different Does it fit? Shape, right shape, wrong
Combine shapes to make new ones – an arch, a bigger	Attempts to create arches and enclosures when building, using	right shape, wrong
Linking Numerals	to select blocks. Links numerals with	square, circle, rectangle One, two, three,
and Amounts Link numerals and amounts: for example, showing the right number of objects to match the numeral up to 5.	amounts up to 5 and maybe beyond (cardinality).	four, five, how many, matching, the same, not that one, which one?
Mark Making Experiment with their own symbols and marks.	Explores using a range of their own marks and signs to which they ascribe mathematical meanings.	One, two, three, four, five, lines, dots,
Pattern Extend and create ABAB patterns e.g. stick, leaf, stick, leaf	Creates their own spatial patterns showing some organization or regularity.	Repeating, the same again, different, one after the other, right/wrong, in a line
Notice and correct an error in a repeating pattern Measure	Extends and creates simple linear patterns of two (AB) or three (ABC) repeating items. In meaningful	Longer/ shorter
	triangle etc. Linking Numerals and Amounts Link numerals and amounts: for example, showing the right number of objects to match the numeral up to 5. Mark Making Experiment with their own symbols and marks. Pattern Extend and create ABAB patterns e.g. stick, leaf, stick, leaf Notice and correct an error in a repeating pattern	triangle etc.to select blocks.Linking Numerals and AmountsLinks numerals with amounts up to 5 and maybe beyond (cardinality).Link numerals and amounts: for example, showing the right number of objects to match the numeral up to 5.Links numerals with amounts up to 5 and (cardinality).Mark Making Experiment with their own symbols and marks.Explores using a range of their own marks and signs to which they ascribe mathematical meanings.Pattern Extend and create ABAB patterns e.g. stick, leaf, stick, leafCreates their own spatial patterns showing some organization or regularity.Notice and correct an error in a repeating patternExtends and creates simple linear patterns of two (AB) or three (ABC) repeating items.

	Make comparisons between objects	longer or shorter of two items.	
	relating to length.		
	Problem solving and Composition of Numbers Solve real world mathematical	Through play and exploration, beginning to learn that numbers are made up (composed) of smaller	One, two, three, one & two more, two & one more, put them together, how
	problems with numbers up to 3.	numbers. Beginning to use	many? Total
		understanding of number to solve practical problems in play and meaningful activities.	
		Separates a group of 3 objects in different ways, beginning to recognise that the total is still the same.	
Summer	Counting	May enjoy counting	One, two, three,
	Reciting numbers up to 10.	verbally as far as they can go.	four, five, six, seven, eight, nine, ten
	Cardinal Principle – know that the last number reached when counting a small set of objects tells you how many there are in total	Counts up to and beyond 5 items recognising that the last number said represents the total counted so far.	One after the other, total, how many?
		Begins to recognise numerals up to 10 and may show fascination with large numbers.	
	Mark Making	Explores using a range	One, two, three,
	Experiment with their own symbols and marks as well as numerals.	of their own marks and signs as well as beginning to write some numerals.	four, five, six, seven, eight, nine, ten
			Lines and dots
	Comparing Quantities and Numbers	Compares two small groups of up to 5 objects, saying when	More than, fewer than, same, different
		there are the same	

	Compare	number of objects in	One, two, three,
	quantities using	each group e.g. <i>you've</i>	four, five
	language: 'more	got 5, I've got 5'.	
	than', 'fewer than'.	Same!	One more
		Beginning to recognise	
		that each counting	
		number is one more	
		than the one before.	
	Shape	Responds to both	Circle, square,
	Talk about and	informal language and	triangle, rectangle,
	explore 2D and 3D	common shape	sphere, cube,
	shapes (for	names.	pyramid, cuboid,
	example, circles,		sides, corners,
	rectangles,	Shows awareness of	straight, flat,
	triangles and	shape similarities and	round, bigger,
	cuboids) using	differences between	smaller, turn,
	informal and	objects.	twist, does it fit?
	mathematical		
	language: 'sides'.	Enjoys partitioning	
	'corners', 'straight',	and combining shapes	
	'flat', 'round'	to make new shapes	
		with 2D and 3D	
		shapes.	
		shapes.	
		Predicts, moves and	
		rotates objects to fit	
		-	
		the space or create	
		the shape they would	
	Desitional	like.	On off under
	Positional	Responds to and uses	On, off, under,
	Language	language of position	beside and
	Understand	and direction.	between
	position through		"The bag is under
	words alone using		the table"
	a sentence		
			.
	Discuss routes and	Discuss position in real	In front of, behind
	locations, using	contexts. Describe	
	words like 'in front	routes and give	Along the road, go
	of' and 'behind'	directions to each	that way, straight
		other.	on, turn, on that
	Describe a familiar		side, on the other
	route		side, wrong, way,
			right way
	Pattern	Joins in with simple	First, then, after,
		patterns in sounds,	before, every day,
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Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then'	objects, games and stories, dance and movement, predicting what comes next. Recalls a sequence of events in everyday life and stories.	evening, morning, afternoon, tomorrow, today, yesterday, next, next day
Measure Make comparisons between objects relating to weight and capacity.	In meaningful contexts finds the heavier or lighter and more/less full of two items.	Heavier/ lighter, more/less full
Problem solving and Composition of Numbers Solve real world mathematical problems with numbers up to 5.	Through play and exploration, beginning to learn that numbers are made up (composed) of smaller numbers. Beginning to use understanding of number to solve practical problems in play and meaningful activities. Separates a group of up to 5 objects in different ways, beginning to recognise that the total is still the same.	One, two, three, four, five, put them together, how many? Total, same, different, fair/unfair

Reception – Mathematics

Term	What we are learning: (Development Matters)	What a child might be doing: (Birth to 5 Matters)	Vocabulary:
Autumn 1	Baseline	-	-
	Counting Counts objects, actions and sounds	Reciting numbers from 0-10 (and beyond) and back from 10-0	Number names
		Encourage cardinal counting by saying how many there are after counting (6, 7, 8. There are 8 balls).	
		Counts out up to 10 objects from a larger group.	
	Linking Numerals and Amounts Link the number symbol (numeral) with its cardinal number value	Matches the numeral with a group of items to show how many there are (up to 10).	Number names
	Measure Compare length, weight and capacity	Becomes familiar with measuring tools in everyday experiences and play	Long, short, longer, shorter, bigger, smaller, more, less, same, different, ruler, heavy, light, heavier, lighter, jug, cup, bowl, bucket, full, empty, half full/empty
	Problem solving and Composition of Numbers Explore the composition of numbers 2 & 3	Shows awareness that numbers are made up (composed) of smaller numbers, exploring portioning in different ways with a wide range of objects. Begins to explore and work out mathematical	Two and three Adding, taking away, plus, subtract, equals, total, same, different, more, odd, even, double, half, how many? Fair/unfair, share

Autumn 2	Counting Counts objects, actions and sounds	problems, using signs and strategies of their own choice including (when appropriate) standard numerals, tallies and "+" or "-". Odd or Even Doubles Increasingly confident at putting numerals in order 0-10 (ordinality). Subitising numbers to	Sequence, order One, two, three,
	Subitise	4 and maybe 5 (5 frame)	four, five
	Shape and Space Select, rotate and manipulate shapes in order to develop spatial reasoning skills	Uses informal language and analogies as well as mathematical terms to describe shapes. Uses spatial language, including following and giving directions, using relative terms and describing what they see from different viewpoints.	Heart shaped, hand shaped, leaf shaped, 2D shapes, circle, square, rectangle, triangle In front of, behind, before and after, in a line, next to, between, up, down, on top of, under, beside
	Counting Count beyond 10	Recognising the pattern of the counting system. Number lines	Number names
	Comparing Quantities and Numbers Compare Numbers	Uses number names and symbols when comparing numbers, showing interest in large numbers.	Number names
		Estimates of numbers of things, showing understanding of relative size. Odd and Even	More/ less, big, smaller, full, empty, half full/empty, lots, fewer, odd, even, guess, what can you see? Roughly,

<mark>Time</mark> (only in birth to 5 matters)	Fair and unfair when sharing quantities Is increasingly able to order and sequence events using everyday language related to time.	similar, different, the same, many, fewer, lots fair and unfair First, next, after, that, then, finally, today, tomorrow, yesterday, the next day, last, before, earlier, later
	Beginning to experience measuring time with timers and calendars (advent calendars).	How many? Longer, shorter, quick, slow, when, days of the week, months, minute, quicker, faster
Problem solving and Composition of Numbers Explore the composition of numbers 4 & 5	Shows awareness that numbers are made up (composed) of smaller numbers, exploring portioning in different ways with a wide range of objects.	Four and five
	Begins to explore and work out mathematical problems, using signs and strategies of their own choice including (when appropriate) standard numerals, tallies and "+" or "-". Odd or Even Doubles	Adding, taking away, plus, subtract, equals, total, same, different, more, odd, even, double, half, how many? Fair/unfair, share
Subitising Subitise	Begins to conceptually subitise larger numbers by subitising smaller groups within the number (10	Number names
	(only in birth to 5 matters) Problem solving and Composition of Numbers Explore the composition of numbers 4 & 5	Time (only in birth to 5 matters)Is increasingly able to order and sequence events using everyday language related to time.Beginning to experience measuring time with timers and calendars (advent calendars).Problem solving and Composition of NumbersShows awareness that numbers are made up (composed) of smaller numbers, exploring portioning in different ways with a wide range of objects.Begins to explore and work out mathematical problems, using signs and strategies of their own choice including (when appropriate) standard numerals, tallies and "+" or "-". Odd or Even DoublesSubitisingBegins to conceptually subitise

Comparing Quantities and Numbers Understand the 'one more than/one less than' relationship between consecutive numbers Pattern Continue, copy and	In practical activities, adds 1 and subtracts 1 with numbers to 10. Number lines. Staircase patterns Spots patterns in the environment	One more/less, bigger smaller, number names Pattern, repeating, what comes next?,
create repeating patterns	beginning to identify 'rule' (including AB, ABB, ABBC).	sequence, the same, recurring, different
Shape and Space Compose and decompose shapes so that children recognise a shape	ABB, ABBC). Enjoys composing and decomposing shapes, learning which shapes combine to make other shapes.	2D and 3D shapes Square, circle, triangle, rectangle
can have other shapes <i>within</i> it, just as numbers can	Uses own ideas to make models of increasing complexity, selecting blocks needed, solving problems, and visualizing what they will build.	Cone, sphere, cuboid, cube, pyramid, cylinder, triangular prism, Big, bigger, small smaller, round, point, 'pointy', straight, corner
	Investigates turning and flipping objects in order to make shapes fit and create models; predicting and visualising how they will look (spatial reasoning).	Edges, faces, curved
Problem solving and Composition of Numbers Explore the composition of numbers 6 & 7	Shows awareness that numbers are made up (composed) of smaller numbers, exploring portioning in different ways with a wide range of objects.	Six and seven

		Begins to explore and work out mathematical problems, using signs and strategies of their own choice including (when appropriate) standard numerals, tallies and "+" or "-". Odd or Even Doubles	Adding, taking away, plus, subtract, equals, total, same, different, more, odd, even, double, half, how many? Fair/unfair, share
Spring 2	Pattern Continue, copy and create repeating patterns	Chooses familiar objects to create and recreate repeating patterns, beyond AB patterns and begins to identify the unit of repeat.	Pattern, repeating, what comes next?, sequence, the same, recurring, different, the same again
	Measure Compare length, weight and capacity	Enjoys tackling problems involving prediction and discussion of comparisons of length, weight or capacity, paying attention to fairness and accuracy.	I think that, long, short, longer, shorter, longest, shortest, tall, tallest, small, smallest, low, lowest, high, highest, medium, in the middle, the same, different, heavy, heavier, heaviest, light, lighter, lightest, fair, unfair, full, fuller, fullest, empty, emptier, emptiest, half full, a little bit, a lot
	Shape and Space Select, rotate and manipulate shapes in order to develop spatial reasoning skills	May enjoy making simple maps of familiar and imaginative environments, with landmarks.	Compass, north, south, east, west, river, mountain, trees, treasure, buildings, tents, near, far, close, a long way, a short way

	Problem solving and Composition of Numbers Explore the composition of numbers 8 & 9	Shows awareness that numbers are made up (composed) of smaller numbers, exploring portioning in different ways with a wide range of objects. Begins to explore and work out mathematical	Eight and nine Adding, taking away, plus, subtract, equals,
		problems, using signs and strategies of their own choice including (when appropriate) standard numerals, tallies and "+" or "-". Odd or Even Doubles	total, same, different, more, odd, even, double, half, how many? Fair/unfair, share
Summer 1	Number Bonds Automatically recall number bonds for numbers 0-5.	Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts).	Number bonds, adding, taking away, plus, minus, double, half
	Time (only in Birth to 5 Matters)	Beginning to experience measuring time with timers and calendars.	Seasons, summer, winter, spring, autumn, days of the week, months, How many? Longer, shorter, quick, slow, when, minute, quicker, faster, holidays, weekends, after school, morning, after lunch, tonight, afternoon, week
	Problem solving and Composition of Numbers Explore the composition of number 10	Shows awareness that numbers are made up (composed) of smaller numbers, exploring portioning in different ways with a wide range of objects.	Number names up to ten

		Begins to explore and work out mathematical problems, using signs and strategies of their own choice including (when appropriate) standard numerals, tallies and "+" or "-". Odd or Even Doubles	Adding, taking away, plus, subtract, equals, total, same, different, more, odd, even, double, half, how many? Fair/unfair, share
Summer 2	Measure Compare length, weight and capacity	Confidently tackling problems involving prediction and discussion of comparisons of length, weight or capacity, paying attention to fairness and accuracy.	I think that, long, short, longer, shorter, longest, shortest, tall, tallest, small, smallest, low, lowest, high, highest, medium, in the middle, the same, different, heavy, heavier, heaviest, light, lighter, lightest, fair, unfair, full, fuller, fullest, empty, emptier, emptiest, half full, a little bit, a lot

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Statutory ELG: Number	Have a deep understanding of number to 10, including the composition of each number.	Number names, number bonds, adding, taking away, plus, minus
	Subitise (recognise quantities without counting) up to 5.	Number names
	Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtractions facts) and some number bonds to 10, including double facts.	Number bonds, adding, taking away, plus, minus, double, half, counting, more, total, sum, equals, answer, is that all?, put them together, how many altogether?, less, fewer, how many, what is left?, what's the difference?
Statutory ELG: Numerical Patterns	Verbally count beyond 20, recognizing the pattern of the counting system.	Number names
	Compare quantities up to 10 in different contexts, recognising when 1 quantity is greater than, less than, or the same as the other quantity.	Greater than, less than, the same as, equal to, the same, different, more/less
	Explore and represent patterns within numbers up to 10 including evens and odds, double facts and how quantities can be distributed equally.	Odd, even, double, fair, unfair, sharing

EYFS New Mathematics Curriculum 2021