

HLC Early Years Foundation Stage Curriculum Progressive Areas of Learning



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 tens 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 the 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.

Nursery	Reception
<p>Number At the end of Nursery, an HLC child will:</p> <ul style="list-style-type: none"> - Combine two groups of objects to make a total (where the total is not greater than 10). - Use manipulative to identify number bonds for 1-5. - Write the numbers from 0-10. - Match numerals to quantities from 1-10. - Adding and taking away from a group of up to 5 objects and identify the new quantity. - Know 'one more' and 'one less' than any number up to 10 using manipulatives for support. 	<p>Number At the end of Reception, an HLC child will:</p> <ul style="list-style-type: none"> - Subitise numbers up to 5 and use ten frames and Hungarian frames to count beyond 5 speedily. - Recall all number bonds for 1-5 and some number bonds for 6-10, including subtraction facts. - Write any number from 1-20 and match numerals to the words. - Match numerals and words to quantities from 1-20 and just beyond. - Subtract by taking away representations of any number up to 20 and identifying the new quantity. - Instantly recall 'one more' and 'one less' than any number up to 20.
<p>Numerical Patterns At the end of Nursery, an HLC child will:</p> <ul style="list-style-type: none"> - Use 1:1 correspondence to count objects up to, and including, 10. - Count to 10 and back from 10 with confidence. - Know that the last number when counting tells them how many are in a group. - Use the language 'more than' and 'less than' when comparing two quantities. - Name and recognise squares, circles and triangles. - Use shapes, colours and objects to create AB patterns and talk about the shapes and colours they have used. - Group objects, up to 10, in twos. - Combine two groups of equal quantity to make a new total. - Share up to 10 objects equally between themselves and a partner. - Use the correct language when talking about length, weight and capacity. 	<p>Numerical Patterns At the end of Reception, an HLC child will:</p> <ul style="list-style-type: none"> - Count beyond 20 from any number and back to 0 from any number up to 20. - Use both cardinal and ordinal numbers when counting groups of objects. - Use the language 'greater than' and 'less than' when comparing quantities. - Name and recognise rectangles (including squares), circles and triangles. - Create repeating patterns – beyond AB – using shapes, colours, manipulatives and other resources. - Know which numbers are odd and which are even from 1-10. - Recall double facts for numbers 1-5 and represent these using manipulatives. - Share up to 20 objects equally between a group. - Compare lengths, weights and capacities using the correct vocabulary. - Make sensible estimations when studying groups of objects.

Nursery	Spring 1 Nursery 1	Spring 2 Nursery 1	Summer 1 Nursery 1	Summer 2 Nursery 1	Autumn 1 Nursery 2	Autumn 2 Nursery 2	Spring 1 Nursery 2	Spring 2 Nursery 2	Summer 1 Nursery 2	Summer 2 Nursery 2
	Traditional Tales	Growing, Growing, Growing!	Bugs, Bugs, Everywhere	Splish, Splash, Splosh	Getting to Know You	Use Your Imagination	Traditional Tales	Growing, Growing, Growing!	Bugs, Bugs, Everywhere	Splish, Splash, Splosh
Nursery	<ul style="list-style-type: none"> - Assign made marks to numbers from 0-10. - Explore quantities by adding to and taking away from them. - Join in with everyday counting as part of the classroom's routines. - Make patterns with resources, although these may not repeat. 	<ul style="list-style-type: none"> - Count physical objects around the classroom. - Observe teachers counting objects during play. - Complete one of different actions ("Do one jump.") - Observe teacher models of counting objects up to 10. - Listen to and take part in counting songs with actions and props. - Share resources whilst playing with peers and teachers. 	<ul style="list-style-type: none"> - Make numerical marks in a range of materials. - Recognise when amounts are getting greater or smaller. - Observe and join in with teacher models of 'touch counting' up to 10. - Listen to stories about shapes. - Talk about patterns they can see in the environment. 	<ul style="list-style-type: none"> - Match numbers to manipulatives. - When prompted by teacher, provide amounts of objects during play ("2 cakes.") - Follow instructions involving one ("Fetch me one apron.") - Count objects up to 10 alongside peers and teachers. - Count everyday objects around the classroom aloud. - Study equal sharing and begin to join in. 	<ul style="list-style-type: none"> - Make vertical, horizontal and curved marks in preparation for digit writing. - Observe teachers modelling adding and taking away during play. - Mirror teacher models of 'touch counting' and any associated mnemonics. - Use shapes in their play and art. - Create repeating patterns with their teacher. - Observe teacher-modelled language relating to length, weight and capacity. 	<ul style="list-style-type: none"> - Use manipulatives to represent numbers to 5. - Use manipulatives to represent amounts to 5 during play. - Take away and add one from quantities during play. - Count objects up to 10 independently. - Count aloud when using counting in their play. - Follow a teacher's model for equal sharing. 	<ul style="list-style-type: none"> - Write numbers when Learning Through Play. - Add to and take away from groups during play. - Demonstrate 'touch counting' when counting objects up to 10. - Create shapes using loose parts and learn the names of these. - Identify the next colour or shape in an AB pattern. - Use resources in their play and talk about their length, weight and capacities using modelled language. 	<ul style="list-style-type: none"> - Use manipulatives to make pairs of numbers. - Match numerals to quantities from 1-5. - With adult support, take away from and add to manipulatives to find 'one more' and 'one less'. - Incorporate counting to 10 in their play. - When counting, assign a number to each object. - Share objects equally with a partner. 	<ul style="list-style-type: none"> - Write the numbers 0-10 with most correctly formed. - Add and take away from a group of up to 5 objects and identify the new number. - Verbally count to 10 and back to 0 confidently, possibly with manipulatives. - Name and recognise squares, circles and triangles. - Use shapes and colours to create AB repeating patterns. - Group objects into pairs. - Use long, heavy and full to describe lengths, weights and capacities. 	<ul style="list-style-type: none"> - Use manipulatives to identify number bonds for 1-5. - Match numerals to quantities for 1-10. - Use manipulatives to find 'one more' and 'one less' than numbers up to 10. - Use 1:1 correspondence to count objects up to, and including 10. - Know that the last number when counting tells them how many there are in a group. - Share groups of objects into 2 groups.

Reception	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Only One You	In my imagination...	Winter Wonderland	Spring has Sprung	Protectors of the Earth	When I grow up!
Reception	<ul style="list-style-type: none"> - Recognise whether there are 1, 2 or 3 objects in a group. - Write the numbers 1-10 using the correct digit formation. - Experiment with adding more and taking away manipulatives from amounts up to 20. - Count beyond 10 and back to 0 without the use of manipulatives. - Name squares, triangles and circles on sight and use them in their play. - Continue repeating patterns which have been created by teachers and their peers. - Know that odd numbers can be shared into 2 equal groups and odd numbers have an 'odd one'. - Estimate quantities without the use of known facts. 	<ul style="list-style-type: none"> - Continue to use manipulatives to identify number bonds for 1-5 and begin to memorise these. - Match numerals, words and quantities for the numbers 1-10. - Add and take away from manipulatives to find 'one more' and 'one less' than numbers up to 20. - Know that the final number used when counting objects indicates the total quantity of those objects. - Know that a double is when a number is added to itself. - Share numbers up to 20 into 2 equal groups as a class or during play. - Use '-est' words when talking about lengths, weights and capacities. 	<ul style="list-style-type: none"> - Subitise numbers up to 5 speedily where amounts are represented pictorially or through manipulatives. - Write and number from 1-20 using the correct digit formation. - Create numbers using manipulatives and then take some away to make a new number. - Count to 20 from 0 and back to 0 from ten numbers. - Talk about the shapes they can see in their learning environment. - Create repeating patterns with three variables, using colours, shapes and manipulatives. - Find odd and even numbers through equal sharing and recalling prior modelling. - Base estimations on known facts ("Here are 10 marbles, how many do you estimate are here?") 	<ul style="list-style-type: none"> - Mentally recall all number bonds for 1-5 without the use of manipulatives. - Match numerals, words and quantities for any number up to 20. - Use a number line to recognise 'one more' and 'one less' for numbers up to 20. - Use ordinal numbers during play and when discussing dates and race results. - Count two groups of objects and state the total of each. - Use manipulatives to identify double facts for numbers 1-5. - Share numbers up to 20 into varying numbers of groups and apply this in their play. - Order multiple lengths, weight and capacities from shortest/lightest/emptiest to longest/heaviest/fulliest. 	<ul style="list-style-type: none"> - Use ten frames and Hungarian frames to count numbers between 5 and 10 speedily. - Match numerals to words for numbers from 1-20 and recall the HLC digit formation mnemonics. - Use manipulatives to solve subtraction problems by taking away amounts from numbers up to 20. - Count beyond 20 from any number and back to 0 from any number up to 20. - Recognise rectangles, circles and triangles and use these shapes in their play. - Create repeating patterns – beyond AB – using shapes and other manipulatives. - Know the odd and even numbers up to 10 from memory. - Make sensible estimations when studying groups of objects and then compare these to actual amounts. 	<ul style="list-style-type: none"> - Recall some number bonds for the numbers 6-10, including subtraction facts. - Match numerals and words to quantities beyond 20 by counting to this amount. - Instantly recall 'one more' and 'one less' than any number up to 20. - Use both cardinal and ordinal numbers when counting and ordering. - Use the language 'greater than' and 'less than' when comparing quantities. - Recall double facts for numbers 1-5 from memory. - Share objects up to 20 into equal groups and decide what should be done with any left over. - Compare lengths, weights and capacities using '-er' words as well as '-est'.

Mathematics Early Learning Goals

Number	Numerical Patterns
<p>Children at the expected level of development will:</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>Children at the expected level of development will:</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.