

Lings Pre-school - 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 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 Programme of Study – Statutory Framework for EYFS 2021**

Area of Learning	Autumn	Spring	Summer	Links to Reception Early Learning Goal
Numbers				
Knowledge and Skills to be Taught	Reciting numbers in playful context, rote count to 5 and beyond Begin to count small groups of objects	Beginning to recite numbers beyond 5. Subitising 1-6 objects More and less language Begin to link numeral to quantity up to 5 and then to 10	Show finger numbers Consistently recite number to 10 Link numeral to quantity up to 5 and beyond Difference in the amount	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.
Possible Lines of Enquiry	Games such as hide and seek Model number line (0-5) Share stories about numbers e.g. The shopping basket, Handa's Hen Number songs Counting games Asking children to collect a number of items	Compare amounts of objects e.g., more or lots Guided play with number pebbles and counting objects Board games	More counting games and songs Numbers in meaningful context More/fewer problems	

Key Vocabulary <i>These are key words and phrases that children need to know and understand</i>	More, less, lots, same, how many, number line/number track, number names			
Ongoing throughout the Year	Reciting number daily as a part of register, how many children, how many adults – written number and numicon to represent Model counting - during stories, while playing, everyday routines Number rhymes and songs Number line Free access to a range of number and sorting resources: pebbles, stencils, number line, compare bears, sorting people, tape measures Numbers in the environment (indoors and outdoors) Numicon in the continuous provision Mark making equipment – chalks and pens etc Dice / dominoes in provision and for games			
Assessment Check Point I.e. - what a child on track should be able to do by the end of this term	Children use some number language during play	Children recite numbers to 5 Children are beginning to recognise numerals to 5 Children say one number name for each item to 5	Children can recite numbers to 10 Children recognise numerals to 5 and beyond. Children can link numerals to a group of objects Children can use the cardinal principle Children can compare quantities	

Area of Learning	Autumn	Spring	Summer	Links to Reception Early Learning Goal
Numerical Patterns				
Knowledge and Skills to be Taught	Notice patterns in the environment	Make a simple repeating pattern	Patterns in sequencing events	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.
Possible Lines of Enquiry <i>These are suggestions only and must be personalised by each setting</i>	Stripes, dots and patterns on fabric, wallpaper, toys Recreate pattern e.g., peg boards, Duplo, movement and music stamp, clap, stamp Matching games e.g., the shopping list game Sequencing the day, stories or recipes. What comes next? e.g., in routines/ daily routines			
Key Vocabulary <i>These are key words and phrases that children need to know and understand</i>	Pattern, repeating patterns, pointy, spotty, stripey, first, then, after, before, morning, afternoon, evening,			
Ongoing throughout the Year	Stacking blocks, cups, Duplo, natural resources to make patterns, floor tiles, blocks, shapes Range of construction resources including Lego, popoids, mobile etc.			
Assessment Check Point	Children use construction materials	Children begin to notice patterns and arrange things	Children are able to make a simple AB repeating pattern.	

I.e. - what a child on track should be able to do by the end of this term		in patterns, they can talk about the pattern		
--	--	--	--	--

DRAFT



Area of Learning	Autumn	Spring	Summer	Link to Reception Early Learning Goal
Shape, Space and Measure				
Knowledge and Skills to be Taught	Talk about and explore 2D shapes Shapes in the environment, Discussing shape properties e.g., pointy bits, corners	Talk about and introduce 3D shape language Compare size, weight and capacity Selecting appropriate shapes	Positional language within play Mathematical vocabulary	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 (not from ELG but from programme of study)
Possible Lines of Enquiry <i>These are suggestions only and must be personalised by each setting</i>	Shape walks Jigsaw puzzles Shape sorters and puzzles Finding shapes in the environment What is in the bag (shapes) Finding and comparing shapes in the environment			
Key Vocabulary <i>These are key words and phrases that children need to know and understand</i>	Small, big, long, wide, more, less, long, short, heavy, light Faces, sides, edges, corners, straight, curved Triangle, circle, rectangle, square, cube On, under, in, up, down			
Ongoing throughout the Year	Construction blocks, jigsaw puzzles Inset and jigsaw puzzles, 2D and 3D shapes, stacking blocks, cups, Duplo Range of construction resources including Lego, popoids, mobile etc Shape sorters, weighing scales, water play, loose parts play Obstacle course – ways of moving Climbing and other outside equipment			

<p>Assessment Check Point</p> <p>I.e. - what a child on track should be able to do by the end of this term</p>	<p>Children use construction materials Children play with shapes</p>	<p>Children select appropriate shapes in play Children beginning to describe shape properties</p>	<p>Children use positional language in their conversations and play Children begin to relate and make comparisons between the size, length and weight of objects</p>	
--	--	---	--	--

DRAFT

