



Childwall CE Primary School

SPECIFIC AREA Mathematics	Number	Numerical Patterns
3 and 4 Year olds	<ul style="list-style-type: none"> ➤ Develop fast recognition of up to 3 objects, without having to count them individually ('subitising'). ➤ Recite numbers past 5. ➤ Say one number for each item in order: 1,2,3,4,5. ➤ Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle'). ➤ Show 'finger numbers' up to 5. ➤ Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. ➤ Experiment with their own symbols and marks as well as numerals. ➤ Solve real world mathematical problems with numbers up to 5. ➤ Compare quantities using language: 'more than', 'fewer than'. 	<ul style="list-style-type: none"> ➤ Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'. ➤ Understand position through words alone – for example, "The bag is under the table," – with no pointing. ➤ Describe a familiar route. ➤ Discuss routes and locations, using words like 'in front of' and 'behind'. ➤ Make comparisons between objects relating to size, length, weight and capacity. ➤ Select shapes appropriately: flat surfaces for building, a triangular prism for a roof, etc. Combine shapes to make new ones – an arch, a bigger triangle, etc. ➤ Talk about and identify the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. ➤ Use informal language like 'pointy', 'spotty', 'blobs', etc. ➤ Extend and create ABAB patterns – stick, leaf, stick, leaf. ➤ Notice and correct an error in a repeating pattern. ➤ Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'
Reception	<ul style="list-style-type: none"> ➤ Count objects, actions and sounds. ➤ Subitise. (<i>Show small quantities in familiar patterns (e.g, dice) and random arrangements. Play games which involve quickly revealing and hiding numbers of objects. Put objects into five frames and then ten frames to begin to familiarise children with the tens structure of the number system. Prompt children to subitise first when enumerating groups of up to 4 or 5 objects: "I don't think we need to count those. They are in a square shape so there must be 4." Count to check. Encourage children to show a number of fingers 'all at once', without counting.</i>) ➤ Link the number symbol (numeral) with its cardinal number value. ➤ Count beyond ten ➤ Compare numbers (Use vocabulary: 'more than', 'less than', 'fewer', 'the same as', 'equal to'.) ➤ Understand the 'one more than/one less than' relationship between consecutive numbers. ➤ Explore the composition of numbers to 10. ➤ Automatically recall number bonds for numbers 0-5 and some to 10. 	<ul style="list-style-type: none"> ➤ Select, rotate and manipulate shapes to develop spatial reasoning skills. (jigsaws, tangrams) ➤ Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can (Investigate how shapes can be combined to make new shapes: for example, two triangles can be put together to make a square) ➤ Continue, copy and create repeating patterns. ➤ Compare length, weight and capacity ("This is heavier than that.", . "What if we pour the jugful into the teapot? Which holds more?")
Early Learning Goal	<ul style="list-style-type: none"> ➤ Have a deep understanding of number to 10, including the composition of each number; 14 ➤ 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. 	<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(sharing)