

ALP Trust Nursery Yearly Maths Overview

Attributes						
<ul style="list-style-type: none"> • Notice when things have similar properties • Use the language of classification, identifying what is the same/ different • Group objects by similarities and differences • Make connections between similarities and differences • Select appropriate objects and materials that match the characteristics of the set, demonstrating that they can copy criteria modelled • Articulate why something is or is not in a set, copying criteria that they have had modelled 						
Subitising	Cardinality, ordinality and counting	Composition	Comparison (inc Measures)	Pattern	Shape and Space	
<p>Recognise (perceptually subitise) groups of 2 familiar objects e.g. hands, feet, eyes, ears, arms, legs.</p> <p>Recognise up to 2 simple objects such as dots in familiar arrangements e.g. dice, linear patterns. These objects will be the same colour and size.</p> <p>Copy the number of objects e.g. match 2 pebbles to two dots on a dice,</p> <p>Identify matching number of objects e.g. 2 dots and 2 bears</p> <p>Begin to notice 3 simple, familiar objects when arranged as a triangle of linear, diagonal pattern (dice)</p>	<p>Recite numbers in order when forward counting to 5 (this can be with the support of rhymes/ songs)</p> <p>Begin to relate the counting sequence to cardinality</p>	<p>Consistently recognise one object.</p> <p>Select one object from a larger group.</p> <p>Recognise that sets can be combined in different orders (but may not recognise that groups are additively composed of smaller groups).</p> <p>Know that a whole is bigger than parts (but may not accurately quantify with numbers).</p>	<p>Begin to compare collections and talk about which group has 'more' when the difference is obvious.</p> <p>Recognise and compare objects which are bigger/ smaller (not necessarily in the correct context e.g. related to height, length, capacity, as well as amount, etc)</p> <p>Use the language of comparison, identifying things that are the same and what is different</p> <p>Notice and describe similarities and differences, and make comparisons in the world around them</p>	<p>Make decisions about what criteria to use to complete and extend a set.</p> <p>Notice and join in and continue with auditory patterns. They can join in with chants such as left. right, left, right, colour chants.</p> <p>Begin to notice visual patterns of increasing complexity e.g. pointy, spotty, stripy, rough, smooth</p> <p>With auditory support they begin to describe patterns using simple adjectives</p> <p>Say what comes next in an AB pattern after three repetitions.</p> <p>Join in with simple refrains in stories such as and he huffed and he puffed</p>	<p>Select shapes which will fit when rotated or flipped insert boards, shape sorters, jigsaws (NCETM)</p> <p>Complete circuits, direct robots/ vehicles along a route (NCETM)</p> <p>Know shape names and properties of common 2D shapes: circle, triangle, rectangle, square (sides, corners, straight, round/curved)</p>	
Subitising	Cardinality, ordinality and counting	Composition	Comparison (inc Measures)	Pattern	Shape and Space	
<p><u>Perceptually</u> subitise 3 then 4 simple, familiar objects when arranged as a triangle, rectangular, linear or diagonal pattern e.g. dice</p> <p>Begin to recognise (perceptually subitise) up to 4 objects in irregular arrangements also.</p> <p>Begin to <u>notice</u> smaller quantities within larger groups e.g. they notice 3 blue cars and 2 red cars, etc .</p> <p>Copy the number of objects e.g. match 4 pebbles to four dots on a dice/ domino,</p> <p>Practise using their fingers to represent quantities which they can subitise</p> <p>Instantly recognise quantities up to 4 and confidently make a matching copy (this can also include arrangement of the objects).</p> <p>Begin to look critically at different arrangements to identify exact matches.</p>	<p>Recite numbers in order when counting forward to 10.</p> <p>Count backward from 3.</p> <p>Relate the counting sequence to cardinality,</p> <p>Understand that the last number spoken gives the number in the entire set (up to 3 objects)</p> <p>Develop 1:1 correspondence of moveable and fixed items (up to 3 objects) when objects are similar and placed in a line</p>	<p>Know the 'twoness' of two.</p> <p>Know that 2 objects is made up of 2 individual objects (e.g. composed of two ones / one and one more)</p> <p>Know that 3 objects is made up of 3 individual objects (e.g. composed of three ones)</p>	<p>Compare collections and talk about which group has 'more' when the difference is obvious. Begin to <u>explain</u> how they know relating to cardinality and counting.</p> <p>Recognise differences of amounts (not significantly different) in the context of sharing e.g. 1 bear has 2 chairs, 1 has one chair and one has no chair or one child has 2 snacks and one child has one snack</p> <p>Recognise when groups are equal e.g. when sharing they have the same amount -they both have 2 snacks</p> <p>Understand 'numerosity' e.g. that the quantity relates to the number of objects not the size of them</p> <p>Compare two groups by matching one to one, saying whether the groups have the same, more or less</p> <p>Identify the 'first' and 'second' object in a sequence.</p>	<p>Notice visual patterns around them. They describe patterns using simple adjectives</p> <p>Begin to notice spatial pattern e.g arrangements of dots in the shape of a triangle, a square, dice patterns, etc)</p> <p>Copy ABABAB patterns, colours, objects, sounds, actions, including size and orientation e.g. big/ small, jump/ twirl, clap/stamp, up/ down, quiet/ loud, yellow/ red, etc</p> <p>Begin to notice growing patterns in stories</p>	<p>Know and use some language of position and direction: in, on, under, up, down, across (NCETM)</p> <p>Know and use language relating to viewpoint: behind, in front of, forwards, backwards, (NCETM)</p> <p>Know shape names and properties of common 2D shapes: circle, triangle, rectangle, square (sides, corners, straight, round, flat/curved, short, long)</p> <p>Select shapes appropriately: flat surfaces for building, a triangular prism for a roof, etc. (Dev Matters/ NCETM)</p> <p>Combine shapes to make new ones – an arch, a bigger triangle, etc. (Dev Matters)</p>	

	<p>Identify missing characteristics in exact replicas.</p> <p>Stories/ rhymes: two little dickie birds, Noah's Ark (story/ song)</p>			<p>Recognise attributes e.g. point out or select objects which are heavier / lighter/ taller/ longer/ shorter</p> <p>Replicate/ copy by selecting appropriate objects and materials that have similar properties demonstrating that they can compare and explain their ideas</p> <p>Order a set of objects, using a given criterion, which has been modelled e.g. shortest to tallest, biggest to smallest, fullest to emptiest, etc.</p>		
	Subitising	Cardinality, ordinality and counting	Composition	Comparison (inc Measures)	Pattern	Shape and Space
<p>Strand Term 3</p> <p>Children will:</p>	<p>Perceptually subitise within 3 (different arrangements, different representations, range of contexts (e.g. at snack time - "I have 3 oranges or two pairs and one orange)</p> <p><u>Perceptually</u> subitise 4 then 5 familiar objects when arranged as a, rectangular, linear or diagonal pattern e.g. dice, domino</p> <p>Begin to recognise (perceptually subitise) up to 5 objects in irregular arrangements also.</p> <p>Begin to <u>conceptually</u> subitise objects of different colours e.g. yellow/ blue counters and know that there are 2 blue and 2 yellow so 4 altogether.</p> <p>Begin to conceptually subitise up to 5 different objects in a range of contexts e.g. 3 bananas and 2 apples make 5 pieces of fruit</p> <p>Copy the number of objects e.g. match 5 pebbles to 5 dots on a dice/ domino,</p> <p>Use their fingers to represent quantities which they can subitise- including using different representations e.g. different combinations of fingers.</p> <p>Instantly recognise quantities up to 5 and confidently make a matching copy (this can also include arrangement of the objects).</p> <p>Look critically at different arrangements to identify exact matches.</p> <p>Talk about the numbers they recognise to break up larger quantities e.g. in six objects they may see a three and a three or a four and a two.</p>	<p>Recite numbers in sequence forward up to 10 (rote counting)</p> <p>Recite numbers backward from 5 (rote counting)</p> <p>Relate the counting sequence to cardinality,</p> <p>Understand that the last number spoken gives the number in the entire set</p> <p>Have 1:1 correspondence of fixed items (up to 5 objects), when objects are similar and placed in a line</p> <p>Develop 1:1 correspondence of moveable items (up to 5 objects)</p> <p>Understand that objects that cannot be seen can also be counted (e.g. claps, sounds)</p> <p>Select a small number of objects from a larger group.</p> <p>Begin to recognise numerals 1, 2, 3 (not related to amounts/ number of objects)</p> <p>Recognise numerals of personal significance e.g. age, door number, etc</p>	<p>Match small groups of up to 4 objects including dissimilar items such as 4 plates for 4 people, 3 chairs for 3 bears, etc</p> <p>Know that 3 is made of three ones (1, 1, and 1) and that four is made of four ones.</p> <p>Compose their own collections within 5.</p>	<p>Make decisions and give reasons about the order of a set of objects, using given attributes. Respond appropriately to questions, with accurate detail to explain their reasoning.</p> <p>Compares collections of 1-4 identical items verbally or nonverbally (just by looking). They begin to compare using number words e.g. one, two, three, four.</p> <p>Matches small (1-4) equal collections consisting of different items e.g. shells and dots, showing that they are the same number.</p> <p>Accurately compares using counting sets of up to 5 objects (objects to be about the same size).</p> <p>Measures:</p> <ol style="list-style-type: none"> 1. Find something that is heavier/ lighter, longer/ shorter than a given reference item 2. During adult led sessions, utilise strategies such as direct comparison e.g. placing objects side by side to determine which is longer. 	<p>Copy, extend and create AB patterns of type e.g. object orientations e.g. up, down</p> <p>Notice and extend quantity patterns</p> <p>Notice, copy and extend patterns in stories</p> <p>Notice, describe, copy and extend growing patterns e.g. increasing quantity of objects</p> <p>Choose their own rule for a pattern and create a pattern.</p>	<p>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' (Dev Matters)</p> <p>Know and use language relating to viewpoint: behind, in front of, forwards, backwards, (left, right (NCETM)</p> <p>Represent spatial relationships- make simple representations of a 3D object e.g. design a garden using a tray with sand, twigs, etc, follow a simple map</p> <p>Begin to identify similarities between shapes: represent a ball as a circle, build a train from rectangular blocks, select a tube for an elephant's trunk,' etc.</p>

<p>Vocabulary to be reinforced by adults</p>	<p>Same/ Different More/ Less/ Fewer Match Guess</p>	<p>Number Count Forward/ Backwards How many, Altogether One, two, three ... ten Next</p>	<p>Same, different More/ Less/ Fewer Match Enough Collection</p>	<p>More, less, fewer, bigger, smaller Longer, shorter Higher, lower Same, different full</p>	<p>Repeated, same, different morning, afternoon, evening, next, before, after, first,</p>	<p>sides, corners, Straight, flat, round in, on, under, up, down, across behind, in front of, forwards, backwards, (left, right) Same, different More, less, fewer</p>
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