

MIS EYFS skills progression - Maths

DM 2020	3-4 - 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'. - 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 identifies 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 - Count objects, actions and sounds. - Subitise. - Link the number symbol (numeral) with its cardinal number value - Count beyond ten. - Compare numbers - 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 0–10. - Select, rotate and manipulate shapes in order to develop spatial reasoning skills. - Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can. - Continue, copy and create repeating patterns. - Compare length, weight and capacity.
ELG 2020	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. 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	
Strand	Sharing	
Element	Numbers and quantities	
Range	0-5 then 0-10	

Progression of skill	Possible misconception	Pedagogical Guidance
Children understand fair and unfair when objects or snacks are shared between them.		Model using the vocabulary fair and unfair. Talk about different scenarios where we use these words, e.g. it is not 'fair' to stop someone having a go in a game, but we also use 'fair' to mean sharing something equally. Provide opportunities to model sharing in a group. Ask the children if the way you have shared resources is 'fair.'
Children can share fairly through activities such as putting food on plates or sharing toys equally.	Children may not recognise that to be shared fairly, everyone needs to have the same amount.	Practise sharing out fruit equally at snack time or sharing out a number of objects such as building bricks. Also explore sharing things such as playdough and looking at size rather than quantity. Discuss with the children that 'fair' is about the amount or size of objects and now how the objects appear (e.g. whether a group of raisins are spread out or close together).
Use the vocabulary of sharing such as 'equal groups', 'sharing fairly', 'shared between', 'fair' and 'unfair'.		Model using a variety of vocabulary when talking about sharing, including fair, unfair, more, fewer, less, shared equally, shared fairly, shared between. Use practical activities, such as sharing snacks and equipment, sharing a number of toys between children or sharing out items in role play. Set up unfair scenarios to encourage children to actively use vocabulary. Model getting it wrong yourself and ask children to tell you how to make it more fair.
Compare groups of objects, saying when they have the same number.	Children might not understand the vocabulary 'same' in terms of number or quantity.	In any of the continuous provision areas, take opportunities to discuss with children how they have shared equipment amongst themselves and whether they have the same number or a different number of objects. Play sharing games with the children where they must share objects between toys or characters, such as sharing coins between pirates, then discuss the amounts and whether they have the same.

Children can count the groups they have made and count how many objects are in each group.	Children struggle to understand whether they are counting the number of groups or the objects in the groups.	Play practical sharing games in small groups using concrete objects. Encourage the children to count their objects into groups, count how many in each group and how many groups they have made.
Children are aware that the original quantity remains unchanged, but it has been shared equally.	Children may not understand that the original quantity remains unchanged and may need to count to check.	Provide opportunities for children to talk about what they have found when sharing by talking about it in whole sentences. For example, 'I shared four apples between two friends. There are still four apples but they have two each.'
They solve problems, including sharing.		Provide children with opportunities to solve problems that involve sharing, such as sharing snacks at a teddy bears' picnic to find out how many snacks they can have each, sharing sweets or sharing shells between two sandcastles. Investigate how many children can fairly share ten sweets. Talk about what happens if there is something 'left over'.