

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	Counting	
Element	Rote counting	
Range	0-5, progressing 0-10 then 0-20	

Progression of skill	Possible misconception	Guidance
Can say some counting words randomly	Children may repeat the same number, such as one, two, two, three or they may mix the order of numbers such as one, three, four, two. They may also insert words.	Use a puppet to model counting correctly and get the children to check whether the puppet is correct.
Can say the number names forward in an unbroken string – forward. Can say the number names forward in an unbroken string – backward.	Children may not understand the significance of the words. That they are individual words and they can be used to count things.	Begin to break the string by inserting a word between each number – such as elephant. Even though the children are not counting at this stage it will help to see them as individual words rather than an unbroken string. Over enunciate and use different voice to draw attention to the pattern of the counting words.
Understand that the order of numbers is fixed and will not change.	Children may think they are counting simply because they are saying counting words.	Model counting correctly. Use a puppet to make mistakes for the children to spot such as One...two...five...
Recognise the significance and value of zero.	Children may think zero is “nothing” as they have only experienced it in terms of ousting.	Include zero when counting to increase children’s awareness of its position within the number system. Talk about zero in terms of a label, a temperature, a floor in a lift, a score or an empty purse.
Can say the number before or after a number, dropping back to one.	Children may not realise that counting can start from other numbers.	Model how to find a number by starting the count for them. If a child is dropping back to one to find what comes after six, start counting at four. Say “Four, five...” and see if the child can find six from there.
Can say the number before or after a number, without dropping back to one.	Children may confuse one more and one less.	When counting, refer to number lines and point to the numbers as you count. Talk about the numbers either side of a given number so that children can begin to visualise the number line for themselves.
Can stop and start in different places forwards. Can stop and start in different places backwards.	Children may forget to stop at their given point.	This is a key skill leading to calculating. You could ask the children to, “Start at two and count on to five.” “Start at eight and count back to four.” Remind the children to stop if they forget and ask them to count again now they know when to stop.

Can count on and keep track of how many they have counted on. Can count back and keep track of how many they have counted back.	Children may count the number they are on. For example, six count on three, "Six, seven, eight. It's eight."	Another key skill leading to calculating. Playing board games is really useful for counting movements rather than, "the one you are on." Ask children to stand on a number track of carpet tiles and take three steps back. What number are they on now? Model the count for them, "You were on six here. Five, four, three, you are now on three."
Can see the recurring pattern in our number system and use this to help them count higher.	Children may reveal their knowledge of the pattern through a misconception, such as eighteen, nineteen, tenteen or twenty-nine, twenty ten.	Understanding pattern is a very important skill for children to make progress with their counting and continue to count beyond ten. Children will begin to see a recurring pattern in which the digits rotate from zero to nine, before restarting at zero. Once children are aware of this pattern, they can apply it to their counting, allowing them to count to much higher numbers. Misconceptions, such as those listed, are actually evidence of understanding of the number pattern. Encourage the children that they are right but we use a different name, "Ten does come after nine, it just changes its name to twenty."
Can enunciate each number clearly.	Children often muddle teen numbers with multiples of ten, such as 18 and 80.	Rather than counting as a group or a class, count around the circle. Listen very closely to how they are pronouncing their teens and overemphasise the pronunciation yourself. Pay particular attention to EAL children, as they may struggle to hear the difference