

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	Counting objects	
Range	0-5 progressing to 0-10 then 0-20	

Progression of skill	Possible misconception	Pedagogical Guidance
Use language associated with counting, such as “more”, “a lot”, “less”.	Children, particularly EAL children, can develop some confusion with opposites and forget which way to go.	Teach one word in isolation, such as “more”, until the children are very confident with this, before moving onto “less”. Use this language in practical contexts, such as snack time.
Say number names to count objects, not necessarily in the right order or at the right speed.	Children may say the number names too quickly and/or in a random sequence, such as “One, two, three, five.”	Model careful counting in a variety of situations, such as snack time, lining the children up, counting how many bikes/toys you have.
Begin to develop one-to-one correspondence and say one number name for each object.	Children may not count each object or may count some objects more than once. They may say several number names when pointing at one object.	Asking the child to insert a word between the number names, such as one car, two cars, three cars will naturally slow down their count. Model counting like this yourself, first from one to three and then further.
Move or touch objects to count them.	Children may think objects need to be counted in a certain order, for example from left to right. Or children may think that you can only start counting from number one.	Exaggerate your body gestures when modelling pointing or moving objects, to subtly draw attention to how you are counting. Use interesting pointers, such as a wand, flyswatter or a torch to increase engagement.
Can count things they can’t touch or see, such as pictures on a wall or sounds.	Children may count each picture more than once.	Encourage children to be methodical - working from left to right or top to bottom. Start them with pictures that are roughly in line before moving to very random arrangements.
Know that when objects are moved, spread out, or moved closer together that the total remains the same.	Children may think there is more of something when you spread them out and fewer when moved closer together.	Give the children lots of opportunities to count. Larger objects, smaller objects and a mixture. Put the objects into a box, spread them out, hold them in your hands, etc.
Knows that the last number they say represents the number of objects in a group.	Children may not yet have developed the concept of cardinality (that the last number they say is the number of objects in the set).	Model counting objects, emphasising the last number to be said, and then follow up with the sentence, “The last number I said was five, so there are five cars.”
Give someone a specified number of objects. Count out a specified number of objects from a larger group.	This is difficult for a child who does not yet understand cardinality. They may just point to the	Model giving the child some objects, emphasising the final number of the count, and say a sentence explaining what you have done.

	third object and say “That one.” when asked, “Show me three.” or “Give me three.”	
Subitise small amounts of objects arranged on a regular pattern, such as a dice pattern. Subitise small amounts of objects arranged in an irregular pattern	Children may think the adult is expecting them to count. Children may try to subitise larger quantities and thus be unsuccessful.	Explain to children it is quicker not to count if they don’t need to and that they do not need to count in ones to check if they can recognise small amounts. Encourage children to subitise by asking them to grab objects. For example, ask them to, “Grab three blocks.”
Make an estimate, such as choosing the group with more objects in, or choosing the group which has closest to ten objects.	Children like to be exact! They will try to count them all. They may not understand the concept of estimation.	Let the children have a look and then cover the objects. Provide them with two very different groups, such as groups of three and eight, and ask them which might have close to ten. To check, move the objects into known groups, such as dice patterns, “I can see a group of five and three more, so I think that is close to ten.” Don’t count them in ones to check, as this will encourage children to keep counting in ones.
Can count on when part of a set of objects is hidden.	Children may start again from one when the objects are hidden. This may be because they do not yet understand that the last number they said is the number of objects in a set. They may not be able to hold a number in their head.	Tap the hidden group and say the number for them. Say the next numbers in the count until they are able to join in.