

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	Comparing	
Element	Numbers and quantities	
Range	0-5 progressing to 0-10	

Progression of skill	Possible misconception	Pedagogical Guidance
Recognise when a group of objects is more than one.	Children do not fully understand the concept of 'more'.	Ensure that the number one is taught in depth so that children have a full understanding of what one looks like. This enables them to know when a group of objects is more than one.
Can indicate, for example by pointing, which group of objects has 'more' objects.	The arrangement of the objects may lead to misconceptions about the amount.	Give lots of examples of what 'more' looks like. Start with very obvious comparisons, such as comparing a set of two objects and a set of ten objects. Arrange the groups in lots of different ways. For example, close together or spread out.
Uses number language, such as 'more' and 'a lot'.	Children use the language but do not understand the meaning behind the words.	Use language in everyday tasks and conversations, using groups of objects to model concepts. For example, "you have a lot of bricks", "you have more bricks than me" or "let's collect some more."
Use language in everyday tasks and conversations, using groups of objects to model concepts. For example, "you have a lot of bricks", "you have more bricks than me" or "let's collect some more."	Children may think that smaller objects or those arranged more closely together are less in quantity.	Use sets of objects that will interest the child. Begin by comparing groups of objects that are the same size and type, such as building bricks, before moving to compare objects of different sizes and layouts.
Uses number language, such as 'less' or 'fewer'.	Initially, these words may not be in the children's vocabulary and therefore they may not understand the meaning of the words.	Use number language in everyday conversations, such as 'there is less paint in the red pot than the blue pot' or 'there is less water in your cup'. Model the word 'fewer' in lots of different adult-led, real-life opportunities so that the children hear the word used correctly lots of times and begin to understand the meaning of it. For example, you may like to discuss which child has fewer strawberries left at snack time or which child has used fewer bricks to build a model.
Can indicate, for example by pointing, which group of objects has 'fewer' objects.	At this point, children may only be familiar with the term 'less'.	Ensure that you make a distinction between the term 'fewer', which is used for countable objects (such as, fewer toys, fewer bikes, fewer apples) and 'less', which is used for uncountable objects or those with no plural (such as, less water, less sand, less money).
Recognise groups with one, two or three objects and begin to make comparisons between quantities, using the language of 'more' and 'fewer'.	Subitising is an important skill that takes lots of practice. When counting objects, children may think it necessary to start at one each time.	Present small groups of objects in different arrangements and encourage children to recognise the amount without counting. Dice patterns and dominoes are useful resources for practising subitising. The word

		'fewer' can be introduced and used alongside the word 'less' to compare groups of objects.
Match groups of objects with the same number.	Children's understanding of 'the same' may mean identical in appearance not just quantity.	Present groups of items that have the same number of objects but different colours for children to explore, count and compare. Then, progress to varying sizes and layouts.
Compare two groups of objects, saying when they have the same number.	If compared with a group of smaller, more compact objects, children may view a group containing larger objects or objects that are spread out as containing 'more'.	Begin by presenting two groups that are formed of the same type and size of objects. Encourage children to arrange groups in rows/lines, side by side, to visually see the difference in quantity.
Know that the quantity of objects stays the same when they are spread out or moved closer together. Understand that objects will appear different if they are spread out or different sizes.	If the same number of objects are arranged differently (e.g. one group is spread out and one is close together), the children may not realise both groups contain the same number of objects.	Have lots of discussions and give a variety of examples of what 'the same' looks like. Use a 'naughty teddy' to move the objects into a different arrangement. Then, count to check that both groups still have the same number in them.
Say the number that comes after a given number in the sequence one to five, progressing to numbers from one to ten.	Children may not realise that the number after a given number is one more.	Use a number line with clearly marked numbers and a character to 'jump' to the next number to make it very clear. Move a toy along a number line or row of numbered toy houses. As you move the toy along the number line, ask children what the next number will be. Also, introduce 'one more' at the same time. For example, "Rufus Rabbit is at number 4, what will the next number be? What is one more?"
Say the number that comes before a given number in the sequence one to five, progressing to numbers from one to ten.	Children need to know how to break count to be able to find the number before another number without starting back at one.	Practise counting backwards, starting from different numbers each time.

Can find one more than a number to five, progressing to numbers to ten.	Children may not yet understand that one more will always be the next number on a number line or in a counting sequence. This may be too abstract for them.	Allow children lots of experience with finding 'one more' in real-life situations, using contexts such as "I have four apples and I buy one more." Refer to the number line to demonstrate how one more always means 'one more' jump to the next number. Children may benefit from opportunities to find out this rule for themselves. For example, through working out one more practically and on a number line to show them that in each instance, one more is the next number.
Can find one less than a number to five, progressing to numbers to ten.	May not fully understand what one less requires, may use fingers to try to take one away instead of using their knowledge of the order of numbers and counting skills.	Children need to understand the phrase 'less'. Practically show removing several items from a group, which leaves less. Give the children lots of opportunities to see that one less is the number that comes before. Once they realise this, they will become confident with one less. Use number lines to jump backwards to find one less. You could also use number shapes with, for example, four and five placed together, for the children to see this visually. You may also like to use ten-frames to explore one less. Asking the children to add a set amount of objects, such as counters to a ten-frame, then remove one each time.
Can find one more and one less than a number to five, progressing to numbers to ten.	Children may muddle 'less' and 'more' when asked to complete activities using both methods.	Repeating activities focussed on just one comparison could be useful. Showing this visually on a number line for children to use. Physically moving along a large number line drawn on the floor also helps to reinforce this idea. Use the language of 'backwards' and 'forwards' to understand one less and one more in a visual way.