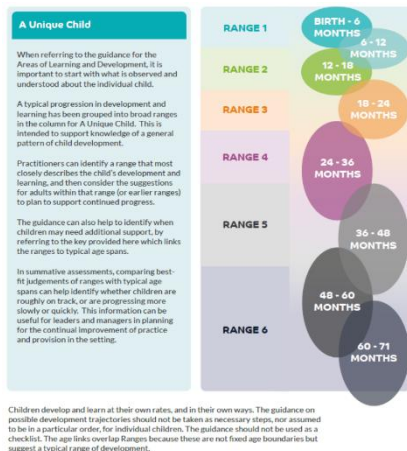


Based on what children might be doing as their knowledge and skills grow across eight key learning areas in maths:

Level	Cardinality (including subitising)	Comparison	Composition	Counting (including number)	Measures	Pattern	Shape	Spatial awareness
1	Reacts to changes of amount when those amounts are significant (more than double).	Reacts to changes of amount when those amounts are significant (more than double).	Reacts to changes of amount when those amounts are significant (more than double).	Reacts to changes of amount when those amounts are significant (more than double).	Responds to size, reacting to very big or very small items that they see or try to pick up.	Shows interest in patterned songs and rhymes, perhaps with repeated actions. Experiences patterned objects and images. Begins to predict what happens next in predictable situations.	Explores differently sized and shaped objects. Beginning to put objects of similar shapes inside others and take them out again.	Explores space when they are free to move, roll and stretch. Developing an awareness of their own bodies, that their body has different parts and where these are in relation to each other.
2	May be aware of number names through their enjoyment of action rhymes and songs that relate to numbers. Looks for things which have moved out of sight.	May be aware of number names through their enjoyment of action rhymes and songs that relate to numbers. Looks for things which have moved out of sight.	May be aware of number names through their enjoyment of action rhymes and songs that relate to numbers. Looks for things which have moved out of sight.	May be aware of number names through their enjoyment of action rhymes and songs that relate to numbers. Looks for things which have moved out of sight.	Shows an interest in objects of contrasting sizes in meaningful contexts. Shows an interest in emptying containers. Gets to know and enjoys daily routine.	Joins in with repeated actions in songs and stories. Initiates and continues repeated actions.	Stacks objects using flat surfaces. Responds to changes of shape. Attempts, sometimes successfully, to match shapes with spaces on inset puzzles.	Explores space around them and engages with position and direction, such as pointing to where they would like to go.
3	Uses number words, like <i>one</i> or <i>two</i> and sometimes responds accurately when asked to give one or two things.	Responds to words like <i>lots</i> or <i>more</i> .	Uses number words, like <i>one</i> or <i>two</i> and sometimes responds accurately when asked to give one or two things.	Says some counting words. May engage in counting-like behaviour, making sounds and pointing or saying some numbers in sequence.	Shows an interest in size and weight. Explores capacity by selecting, filling and emptying containers, e.g. fitting toys in a pram. Beginning to understand that some things might happen now or at another time, in routines.	Becoming familiar with patterns in daily routines. Joins in with and predicts what comes next in a story or rhyme. Beginning to arrange items in their own patterns e.g. lining up toys.	Pushes objects through different shaped holes, and attempts to fit shapes into spaces on inset boards or puzzles. Beginning to select a shape for a specific space. Enjoys using blocks to create their own simple structures and arrangements.	Enjoys filling and emptying containers. Investigates fitting themselves inside and moving through spaces.

4	In everyday situations, accurately takes or gives two or three objects from a group. Beginning to notice numerals (number symbols). Beginning to count on their fingers. Beginning to subitise on their fingers and understand the arrangement of 'two' or 'three' fingers without having to count them	Beginning to compare and recognise changes in numbers of things, using words like more, lots or 'same'.	In everyday situations, takes or gives two or three objects from a group. Beginning to count on their fingers.	Begins to say numbers in order, some of which are in the right order (ordinality).	Explores differences in size, length, weight and capacity. Beginning to understand some talk about immediate past and future. Beginning to anticipate times of the day such as mealtimes or home time.	Joins in and anticipates repeated sound and action patterns. Is interested in what happens next using the pattern of everyday routines.	Chooses puzzle pieces and tries to fit them in. Recognises that two objects have the same shape. Makes simple constructions.	Moves their bodies and toys around objects and explores fitting into spaces. Begins to remember their way around familiar environments. Responds to some spatial and positional language. Explores how things look from different viewpoints including things that are near or far away.
5	Counts up to five items, recognising that the last number said represents the total counted so far (cardinal principle). Links numerals with amounts up to 5 and maybe beyond. Explores using a range of their own marks and signs to which they ascribe mathematical meanings. Subitises one, two and three objects (without counting). Through play and exploration, beginning to learn that numbers are made up (composed) of smaller numbers.	Compares two small groups of up to five objects, saying when there are the same number of objects in each group, e.g. <i>You've got two, I've got two. Same!</i>	Through play and exploration, beginning to learn that numbers are made up (composed) of smaller numbers. Beginning to use understanding of number to solve practical problems in play and meaningful activities. Beginning to recognise that each counting number is one more than the one before. Separates a group of three or four objects in different ways, beginning to recognise that the total is still the same.	May enjoy counting verbally as far as they can go. Points or touches (tags) each item, saying one number for each item, using the stable order of 1,2,3,4,5. Uses some number names and number language within play, and may show fascination with large numbers. Begins to recognise to recognise numerals 0 to 10.	In meaningful contexts, finds the <i>longer</i> or <i>shorter</i>, <i>heavier</i> or <i>lighter</i> and <i>more/less full</i> of two items. Recalls a series of events in everyday life and stories.	Creates their own spatial patterns showing some organisation or regularity. Explores and adds to simple linear patterns of two or three repeating items, e.g. stick, leaf (AB) or stick, leaf, stone (ABC). Joins in with simple patterns in sounds, objects, games and stories, dance and movement, predicting what comes next.	Chooses items based on their shape which are appropriate for the child's purpose. Responds to both informal language and common shape names. Shows awareness of shape similarities and differences between objects. Enjoys partitioning and combining shapes to make new shapes with 2D and 3D shapes. Attempts to create arches and enclosures when building, using trial and improvement to select blocks.	Responds to and uses language of position and direction. Predicts, moves and rotates objects to fit the space or create the shape they would like.

6	Counts out up to 10 objects from a larger group. Matches the numeral with a group of items to show how many there are (up to 10). Engages in subitising numbers to four and maybe Five. Begins to conceptually subitise larger numbers by subitising smaller groups within the number, e.g. sees six raisins on a plate as three and three.	Uses number names and symbols when comparing numbers, showing interest in large numbers. Estimates numbers of things, showing understanding of relative size.	Shows awareness that numbers are made up (composed) of smaller numbers, exploring partitioning in different ways with a wide range of objects. Begins to conceptually subitise larger numbers by subitising smaller groups within the number, e.g. sees six raisins on a plate as three and three. In practical activities, adds one and subtracts one with numbers to 10. Begins to explore and work out mathematical problems, using signs and strategies of their own choice, including (when appropriate) standard numerals, tallies and "+" or "-".	Enjoys reciting numbers from 0 to 10 (and beyond) and back from 10 to 0. Increasingly confident at putting numerals in order 0 to 10 (ordinality).	Enjoys tackling problems involving prediction and discussion of comparisons of length, weight or capacity, paying attention to fairness and accuracy. Becomes familiar with measuring tools in everyday experiences and play. Is increasingly able to order and sequence events using everyday language related to time. Beginning to experience measuring time with timers and calendars.	Spots patterns in the environment, beginning to identify the pattern "rule". Chooses familiar objects to create and recreate repeating patterns beyond AB patterns and begins to identify the unit of repeat.	Uses informal language and analogies, (e.g. heart shaped and hand-shaped leaves), as well as mathematical terms to describe shapes. Enjoys composing and decomposing shapes, learning which shapes combine to make other shapes. Uses own ideas to make models of increasing complexity, selecting blocks needed, solving problems and visualising what they will build.	Uses spatial language, including following and giving directions, using relative terms and describing what they see from different viewpoints. Investigates turning and flipping objects in order to make shapes fit and create models; predicting and visualising how they will look (spatial reasoning). May enjoy making simple maps of familiar and imaginative environments, with landmarks.
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Reference: Birth to 5 Matters – Non-statutory guidance for the Early Years Foundation Stage www.birthto5matters.org.uk