## EYFS Progression of Knowledge, Skills and Understanding

## Maths

| Mathematics |  |  |  |
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|  | 3 years and rising 5s | In Reception | ELG |
| Number |  |  |  |
| Comparison | - Compares two small groups of up to five objects, saying when there are the same number of objects in each group, e.g. You've got two, l've got two. Same! | - Uses number names and symbols when comparing numbers, showing interest in large numbers <br> - Estimates of numbers of things, showing understanding of relative size | Number: Have a deep understanding of number to 10 , including the composition of each number; <br> Subitise (recognise quantities without counting) up to 5 . |
|  | - May enjoy counting verbally as far as they can go <br> - Points or touches (tags) each item, saying one number | - Enjoys reciting numbers from 0 to 10 (and beyond) and back from 10 to 0 <br> - Increasingly confident at putting numerals in order 0 to 10 (ordinality) |  |
| Counting | for each item, using the stable order of $1,2,3,4,5$. <br> - Uses some number names and number language within play, and may show fascination with large numbers <br> - Begin to recognise numerals 0 to 10 |  | 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. |
| Cardinality | - Subitises one, two and three objects (without counting) <br> - Counts up to five items, recognising that the last number said represents the total counted so far (cardinal principle) | - Engages in subitising numbers to four and maybe five <br> - 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) | including double facts. <br> Numerical pattern: Verbally count beyond 20, recognising the pattern of the counting system. |
| Composition | - Links numerals with amounts up to 5 and maybe beyond <br> - Explores using a range of their own marks and signs to which they ascribe mathematical meanings <br> - Through play and exploration, beginning to learn that numbers are made up (composed) of smaller numbers <br> - Beginning to use understanding of number to solve practical problems in play and meaningful activities | - Shows awareness that numbers are made up (composed) of smaller numbers, exploring partitioning in different ways with a wide range of objects <br> - 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 | Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. |
|  | - Beginning to recognise that each counting number is one more than the one before - Separates a group of | - Begins to explore and work out mathematical problems, using signs and strategies of their own choice, including (when appropriate) standard numerals, tallies and " + " or "_" | Explore and represent patterns within numbers up to 10 , |


|  | three or four objects in different ways, beginning to recognise that the total is still the same. |  | including evens and odds, double facts and how quantities c |
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| Spatial Awareness | - Responds to and uses language of position and direction <br> - Predicts, moves and rotates objects to fit the space or create the shape they would like | - Uses spatial language, including following and giving directions, using relative terms and describing what they see from different viewpoints <br> - Investigates turning and flipping objects in order to make shapes fit and create models; predicting and visualising how they will look (spatial reasoning) <br> - May enjoy making simple maps of familiar and imaginative environments, with landmarks. |  |
| Shape | - Chooses items based on their shape which are appropriate for the child's purpose <br> - Responds to both informal language and common shape names <br> - Shows awareness of shape similarities and differences between objects <br> - 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 | - Uses informal language and analogies, (e.g. heart-shaped and hand-shaped leaves), as well as mathematical terms to describe shapes <br> - Enjoys composing and decomposing shapes, learning which shapes combine to make other shapes <br> - Uses own ideas to make models of increasing complexity, selecting blocks needed, solving problems and visualising what they will build |  |
| Pattern | - Creates their own spatial patterns showing some organisation or regularity <br> - Explores and adds to simple linear patterns of two or three repeating items, e.g. stick, leaf (AB) or stick, leaf, stone (ABC) <br> - Joins in with simple patterns in sounds, objects, games and stories dance and movement, predicting what comes next | - Spots patterns in the environment, beginning to identify the pattern "rule" <br> - Chooses familiar objects to create and recreate repeating patterns beyond $A B$ patterns and begins to identify the unit of repeat |  |
| Measure | - In meaningful contexts, finds the longer or shorter, heavier or lighter and more/less full of two items <br> - Recalls a sequence of events in everyday life and stories | - Enjoys tackling problems involving prediction and discussion of comparisons of length, weight or capacity, paying attention to fairness and accuracy <br> - Becomes familiar with measuring tools in everyday experiences and play <br> - Is increasingly able to order and sequence events using everyday language related to time <br> - Beginning to experience measuring time with timers and calendars |  |

