

Mathematical Development Skills Progression- EYFS

|  | Skills | Nursery Progression |  |  |  | Reception progression |  |  |  | Links to KS1 Curriculum <br> Identify and represent numbers using objects and pictorial representations. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Subitise | Perceptual subitising recognise values | Subitise objects up to 3 |  | Know that the quantity is the same however it is arranged. | Group objects and know amounts in groups without counting | Subitise | jects up to | Conceptual subitising recognising smaller amounts within larger ones (parts/whole) |  |
|  | Composition | Can talk about the different numbers within a number. E.g. There are 5 spots and I can see 4 and a 1. <br> Can physically partition several things into two groups and can recognise these groups can be recombined to make the same total. |  |  |  | Know numbers can be partitioned into different pairs of numbers. | Know th can be pa more than (Part | a number itioned into 2 numbers. whole) | Number bonds: Know which pairs make a given number. | Identify and represent numbers using objects and pictorial representations Read and write numbers to 20 in numerals and words |
|  | Addition and subtraction | Solve real world maths problems with numbers up to 5 . | Know which groups of objects have more, less and the same. |  | Know that a group of things changes in quantities when something is added or taken away. | Recall subtraction and addition facts to 5 and some to 10 . |  | Use some addition and subtraction mathematical vocabulary. |  | Represent and use number bonds and related facts within 20. <br> Represent and use number bonds Solve one-step number problems involving addition, subtraction, division and multiplication. |
|  |  |  |  |  | Double numbers with concrete objects. | Begin to recall some double facts. |  |  |


| Numerical patterns | Counting | Say number words in sequence. (initially 5 , then 10 and then extending to larger numbers.) |  | Tag each object with one number word. |  | Know that the last number counted gives the total so far. |  | Count objects, actions and sounds. <br> Count beyond 10. | Links numeral with cardinal number value. | Know that a number does not change if objects are rearranged | Begin to count beyond 20 | Count to and across 100 <br> Count, read and write numbers to 100 in numerals Read and write numbers from 1 to 20 in numerals. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Comparison | More than/less than. Compare collections and begin to talk about which group has more. |  | Identify groups with the same number of things. |  | Use vocabulary more, less, fewer and same to compare quantities |  | Compare numbers and reasoning: compare numbers that are far apart, near to and next to each other. For example, 8 is a lot more that 2 but 3 is only a little bit bigger. |  | Knows the 'one more than/one less than' a given number. |  | Given a number, identify one more or less. <br> Solve one-step number problems |
|  | Pattern in numbers | Explore numbers with concrete objects - grouping and sharing. |  |  | Understand fair and unfair when objects are shared between them. Understand equal parts and whole of shapes. |  |  | Share fairy through practical activities. Split objects into two equal groups. | Use vocabulary of sharing and halving | Be aware that the original quantity remains unchanged, but it has been shared or halved equally | Begin to solve problems involving sharing and halving. | Solve one-step number problems involving addition, subtraction, division and multiplication. Recognise, find |
|  |  | Begin to sequence numbers. |  |  |  |  |  | Sequence numbers up to 10 | Begin to count in 2 s and 10 s . | Begin to understan numbers by using and beginning to | d odds and even concrete objects see the pattern. | and name half and quarter of an object, shape or quantity. |
| Not represented as ELG | Measure | Recognising attributes. E.g. Length - that stick is long, adults are tall | Comparing amounts of continuous quantities. E.g. Can find something longer/shorter/ heavier/light than a given reference |  | Show an awareness of comparison in estimating and predicting. |  | Comparing indirectly - using one thing to compare with two others. | Recognise the relationship between the size and number of units. | Begin to use units to compare things. | Begin to use time to sequence events. Begin to experience specific time durations. E.g. Number of sleeps. | To compare length, weight, time and capacity. | Compare, describe and solve practical problems for: length, mass/weight, capacity |
|  | Pattern <br> (Link to patterns in numbers) | Talk about and identify the patterns around them. |  | opy and tinue an B pattern | Create own ABAB patterns. |  | Notice and correct an error in an ABAB pattern. | Identify the unit of repeat. | Continue an $A B C$ pattern that ends mid unit. | Continue and create more complex patterns. E.g. $A B C, A B B, A B B C$. Spotting errors in patterns. | Can record the patterns they make by symbolising the unit structure. | Describe position, direction and movement, including whole, half, quarter and three-quarter turns. <br> Explore and identify patterns |


|  | Shape |  |  |  |  |  |  |  |  | in the number system. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Develop spatial awareness: experiencing different viewpoints. | Develop spatial vocabulary to describe position and direction. <br> E.g. In, on, under, up, down | Explores shapes (2d and 3d) and the attributes of particular shapes through play. | Begin to show awareness of the properties of shapes, identifying similarities. Use informal and mathematical language to describe them. | Combine shapes to create new ones - select, rotate and manipulate shapes. | Describe the properties of 2d and 3d shapes. | Develop an awareness of the relationships between shapes. E.g. Compose and decompose shapes to see the shapes within shapes. | Use spatial reasoning skills to create and solve problems. | Recognise and name common 2d and 3d shapes. |

*National Centra for Excellence in the Teaching of mathematics progression guidance
*Development Matters 2020

