## <u>Maths in EYFS</u>



The EYFS framework is structured very differently to the national curriculum as it is organised across seven areas of learning rather than subject areas. The aim of this document is to help subject leaders to understand how the skills taught across EYFS feed into national curriculum subjects.

This document demonstrates which statements from the 2020 Development Matters are essential skills for mathematics within the national curriculum. The table below outlines the most relevant statements taken from the Early Learning Goals in the EYFS statutory framework and the Development Matters age ranges for Three and Four-Year-Olds and Reception to match the programme of study for mathematics.

The most relevant statements for mathematics are taken from the following areas of learning:

- Communication and Language
- Mathematics

| Mathematical Vocabulary         |                               |          |                                                                                                                                                           |
|---------------------------------|-------------------------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Three and<br>Four-Year-<br>Olds | Communication and Language    |          | <ul> <li>Use a wider range of vocabulary.</li> <li>Understand 'why' questions, like: "why do you think the caterpillar is so fat?"</li> </ul>             |
| Reception                       | Communication and Language    |          | <ul><li>Learn new vocabulary.</li><li>Use new vocabulary throughout the day.</li></ul>                                                                    |
| ELG                             | Communication<br>and Language | Speaking | <ul> <li>Participate in small group, class and one-to-one<br/>discussions, offering their own ideas, using recently<br/>introduced vocabulary.</li> </ul> |

| Number and Place Value                           |             |                       |                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------|-------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Counting                                         |             |                       |                                                                                                                                                                                                                                                                                                                                                                  |
| Three and<br>Four-Year-<br>Olds                  | Mathematics |                       | <ul> <li>Recite numbers past 5.</li> <li>Say one number name for each item in order: 1, 2, 3, 4, 5.</li> <li>Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').</li> </ul>                                                                                                     |
| Reception                                        | Mathematics |                       | <ul><li>Count objects, actions and sounds.</li><li>Count beyond ten.</li></ul>                                                                                                                                                                                                                                                                                   |
| ELG                                              | Mathematics | Numerical<br>Patterns | <ul> <li>Verbally count beyond 20, recognising the pattern of<br/>the counting system.</li> </ul>                                                                                                                                                                                                                                                                |
| Identifying, Representing and Estimating Numbers |             |                       |                                                                                                                                                                                                                                                                                                                                                                  |
| Three and<br>Four-Year-<br>Olds                  | Mathematics |                       | <ul> <li>Develop fast recognition of up to 3 objects, without having to count them individually ('subitising').</li> <li>Show 'finger numbers' up to 5.</li> <li>Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.</li> <li>Experiment with their own symbols and marks as well as numerals.</li> </ul> |
| Reception                                        | Mathematics |                       | <ul> <li>Subitise.</li> <li>Link the number symbol (numeral) with its cardinal number value.</li> </ul>                                                                                                                                                                                                                                                          |

| ELG                         | Mathematics                 | Number                | Subitise (recognising quantities without counting) up to 5.                                                                                                                                              |  |
|-----------------------------|-----------------------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Reading and W               | Reading and Writing Numbers |                       |                                                                                                                                                                                                          |  |
| Three and<br>Four-Year-Olds | Mathematics                 |                       | <ul> <li>Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.</li> <li>Experiment with their own symbols and marks as well as numerals.</li> </ul> |  |
| Reception                   | Mathematics                 |                       | <ul> <li>Link the number symbol (numeral) with its cardinal<br/>number value.</li> </ul>                                                                                                                 |  |
| Compare and Order Numbers   |                             |                       |                                                                                                                                                                                                          |  |
| Three and<br>Four-Year-Olds | Mathematics                 |                       | • Compare quantities using language: 'more than', 'fewer than'.                                                                                                                                          |  |
| Reception                   | Mathematics                 |                       | Compare numbers.                                                                                                                                                                                         |  |
| ELG                         | Mathematics                 | Numerical<br>Patterns | <ul> <li>Compare quantities up to 10 in different contexts, recognising<br/>when one quantity is greater than, less than or the same as the<br/>other quantity.</li> </ul>                               |  |
| Understanding Place Value   |                             |                       |                                                                                                                                                                                                          |  |
| Reception                   | Mathematics                 |                       | <ul> <li>Understand the 'one more than/one less than' relationship between consecutive numbers.</li> <li>Explore the composition of numbers to 10.</li> </ul>                                            |  |
| ELG                         | Mathematics                 | Number                | <ul> <li>Have a deep understanding of numbers to 10, including the<br/>composition of each number.</li> </ul>                                                                                            |  |
| Solve Problems              |                             |                       |                                                                                                                                                                                                          |  |
| Three and<br>Four-Year-Olds | Mathematics                 |                       | Solve real world mathematical problems with numbers up to 5.                                                                                                                                             |  |

| Addition and Subtraction |             |                       |                                                                                                                                                                                                                |
|--------------------------|-------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mental Calculations      |             |                       |                                                                                                                                                                                                                |
| Reception                | Mathematics |                       | <ul> <li>Automatically recall number bonds for numbers 0-5 and some<br/>to 10.</li> </ul>                                                                                                                      |
| ELG                      | Mathematics | Number                | <ul> <li>Automatically recall (without reference to rhymes, counting or<br/>other aids) number bonds up to 5 (including subtraction facts)<br/>and some number bonds to 10, including double facts.</li> </ul> |
| Solve Problems           |             |                       |                                                                                                                                                                                                                |
| ELG                      | Mathematics | Numerical<br>Patterns | <ul> <li>Explore and represent patterns within numbers up to 10,<br/>including evens and odds, double facts and how quantities<br/>can be distributed evenly.</li> </ul>                                       |

| Measurement                                        |             |                                                                                                         |
|----------------------------------------------------|-------------|---------------------------------------------------------------------------------------------------------|
| Describe, Measure, Compare and Solve (All Strands) |             |                                                                                                         |
| Three and<br>Four-Year-Olds                        | Mathematics | <ul> <li>Make comparisons between objects relating to size, length,<br/>weight and capacity.</li> </ul> |
| Reception                                          | Mathematics | Compare length, weight and capacity.                                                                    |

| Three and<br>Four-Year-OldsMathematics• Begin to describe a sequence<br>words, such as 'first', 'then | e of events, real or fictional, using |
|-------------------------------------------------------------------------------------------------------|---------------------------------------|

| Properties of Shapes        |                                                 |                                                                                                                                                                                                                                                                                                                                                                                                        |  |
|-----------------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Recognise 2D                | Recognise 2D and 3D Shapes and their Properties |                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| Three and<br>Four-Year-Olds | Mathematics                                     | <ul> <li>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'.</li> <li>Select shapes appropriately: flat surfaces for a building, a triangular pattern for a roof, etc.</li> <li>Combine shapes to make new ones – an arch, a bigger triangle, etc.</li> </ul> |  |
| Reception                   | Mathematics                                     | <ul> <li>Select, rotate and manipulate shapes in order to develop<br/>spatial reasoning skills.</li> </ul>                                                                                                                                                                                                                                                                                             |  |
| Compare and Classify Shapes |                                                 |                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| Reception                   | Mathematics                                     | <ul> <li>Compose and decompose shapes so that children can<br/>recognise a shape can have other shapes within it, just as<br/>numbers can.</li> </ul>                                                                                                                                                                                                                                                  |  |

| Position and Direction      |                                  |                                                                                                                                                                                                                                                                                                                                      |  |  |
|-----------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Position, Direc             | Position, Direction and Movement |                                                                                                                                                                                                                                                                                                                                      |  |  |
| Three and<br>Four-Year-Olds | Mathematics                      | <ul> <li>Understand position through words alone – for example, "The bag is under the table," – with no pointing.</li> <li>Describe a familiar route.</li> <li>Discuss routes and locations, using words like 'in front of' and 'behind'.</li> </ul>                                                                                 |  |  |
| Reception                   | Understanding the World          | Draw information from a simple map.                                                                                                                                                                                                                                                                                                  |  |  |
| Patterns                    |                                  |                                                                                                                                                                                                                                                                                                                                      |  |  |
| Three and<br>Four-Year-Olds | Mathematics                      | <ul> <li>Talk about and identify the patterns around them. For example, stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs', etc.</li> <li>Extend and create ABAB patterns – stick, leaf, stick, leaf.</li> <li>Notice and correct an error in a repeating pattern.</li> </ul> |  |  |
| Reception                   | Mathematics                      | Continue, copy and create repeating patterns.                                                                                                                                                                                                                                                                                        |  |  |

| Statistics                         |             |                                                                                           |
|------------------------------------|-------------|-------------------------------------------------------------------------------------------|
| Record, Present and Interpret Data |             |                                                                                           |
| Three and<br>Four-Year-Olds        | Mathematics | <ul> <li>Experiment with their own symbols and marks, as well<br/>as numerals.</li> </ul> |