

Mathematics

Statutory ELG: Number

Children at the expected level of development will:

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

Statutory ELG: Numerical Patterns

Children at the expected level of development will:

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.

Statutory Educational Programme: Mathematics

In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.

Birth to five matters

Comparison

Uses number names and symbols when comparing numbers, showing interest in large numbers
Estimates of numbers of things, showing understanding of relative size

Counting

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)

Cardinality

Engages in subitising numbers to four and maybe five. 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)

Composition

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 "-"

Spatial Awareness

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

Shape

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

Pattern

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

Measures

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

Tier 3 Vocabulary

Mathematically context