

# EYFS Progression of skills in Mathematics

• Explores differences in size, length, weight and capacity

· Beginning to understand some talk about

· Beginning to anticipate times of the day such as

immediate past and future

mealtimes or home time

Measures

Range 4	Range 5	
Comparison  Beginning to compare and recognise changes in numbers of things, using words like more, lots or 'same'  Counting	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, I've got two. Same!	Spatial Awareness  Responds to and uses language of position and direction Predicts, moves and rotates objects to fit the
<ul> <li>Begins to say numbers in order, some of which are in the right order (ordinality)</li> <li>Cardinality (How many?)</li> <li>In everyday situations, takes or gives two or three objects from a group</li> <li>Beginning to notice numerals (number symbols)</li> <li>Beginning to count on their fingers.</li> </ul>	Counting  • 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  • Begin to recognise numerals 0 to 10	space or create the shape they would like Shape  Chooses items based on their shape which are appropriate for the child's purpose Responds to both informal language and common Shows awareness of shape similarities and differences between objects
Spatial Awareness  · 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 Shape	Cardinality  • Subitises one, two and three objects (without counting)  • 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 shape names	<ul> <li>Enjoys partitioning and combining shapes to make new shapes with 2D and 3D shapes</li> <li>Attempts to create arches and enclosures when building, using trial and improvement to select block Pattern</li> <li>Creates their own spatial patterns showing some organisation or regularity</li> <li>Explores and adds to simple linear patterns of two or three repeating items, e.g. stick, leaf (AB) or</li> </ul>
<ul> <li>Chooses puzzle pieces and tries to fit them in</li> <li>Recognises that two objects have the same shape</li> <li>Makes simple constructions</li> <li>Pattern</li> <li>Joins in and anticipates repeated sound and action patterns</li> <li>Is interested in what happens next using the pattern of everyday routines</li> </ul>	Composition  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	stick, leaf, stone (ABC)  • Joins in with simple patterns in sounds, objects, games and stories dance and movement, predicting what comes next  Measures  • In meaningful contexts, finds the longer or shorter, heavier or lighter and more/less full of

still the same

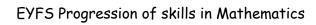
· Separates a group of three or four objects in

different ways, beginning to recognise that the total is

two items

stories

· Recalls a sequence of events in everyday life and







## EYFS Progression of skills in Mathematics

## Range 6

## 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
- $\cdot$  Increasingly confident at putting numerals in order 0 to 10 (ordinality)  $extit{Cardinality}$
- Engages in subitising numbers to four and maybe five
- · Counts out up to 10 objects from a larger group
- $\cdot$  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

#### Patteri

- · Spots patterns in the environment, beginning to identify the pattern "rule"
- $\cdot$  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
- $\cdot$  Is increasingly able to order and sequence events using everyday language related to time  $\cdot$  Beginning to experience measuring time with timers and calendars

## ELG

## 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 ELG: 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.

