

## Mathematics Curriculum Plan - Early Years 2020 - 2021

### Number and Place Value

#### Counting

30-50 Months	Mathematics	Numbers	To recite numbers in order to 10. To realise not only objects, but anything can be counted including steps, claps or jumps
40-60 Months	Mathematics	Numbers	To count up to three or four objects by saying one number name for each item. To count out up to six objects from a larger group. To count actions or objects which cannot be moved. To count objects to 10 and beginning to count beyond 10. To count an irregular arrangement of up to ten objects. To estimate how many objects, they can see and check by counting them.
ELG	Mathematics	Numbers	To count reliably with numbers from one to 20

**Vocabulary:** *Counting, number, mathematics, maths, one-to-one correspondence, patterns, repeating, repetition, teen, digit, single digit, two-digit, zero, altogether, total, set, numeral, how many?, none, zero, more, less, fewer, same, point, move, small, smallest, bigger, biggest, estimate, next, before, cardinality, subitising, conservation of number, concrete, pictorial, abstract, consecutive, ordinal, quantification, irregular arrangement, rote counting, forwards, backwards*

#### Identifying, Representing and Estimating Numbers

30-50 Months	Mathematics	Numbers	To use some number names and number language spontaneously. To know that numbers identify how many objects are in a set. To show an interest in representing numbers. To begin to represent numbers using fingers, marks on paper or pictures.
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			To separate a group of three or four objects in different ways, beginning to recognise that the total is still the same. To sometimes match numeral and quantity correctly.
40-60 Months	Mathematics	Numbers	To select the correct numeral to represent 1 to 5, then 1 to 10 objects. To say the number that is one more than a given number. To find one more or one less from a group of up to five objects, then ten objects.
ELG	Mathematics	Numbers	To say which number is one more or one less than a given number from one to 20.

### Reading and Writing Numbers

30-50 Months	Mathematics	Numbers	To show an interest in numerals in the environment. To use some number names accurately in play.
40-60 Months	Mathematics	Numbers	To recognise some numerals of personal significance. To recognise numerals 1 to 5.

**Vocabulary:** *Number, numeral, number names, count, match, same, different, order, smallest, largest, biggest, more, less, before, after, recognise, read, marks, tell me about..., pictures, lines, shape, represent, show, draw, write, same, different, can you show me...*

### Compare and Order Numbers

30-50 Months	Mathematics	Numbers	To compare two groups of objects, saying when they have the same number.
40-60 Months	Mathematics	Numbers	To use the language of 'more' and 'fewer' to compare two sets of objects.
ELG	Mathematics	Numbers	To place numbers one to 20 in order.

**Vocabulary:** *More, less, fewer, same, difference, equal, unequal, bigger, smaller, one more, one less, compare, comparison, quantities, quantity, amount.*

## Understanding Place Value

30-50 Months	Mathematics	Numbers	To show curiosity about numbers by offering comments or asking questions.
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## Solve Problems

30-50 Months	Mathematics	Numbers	To show an interest in number problems
40-60 Months	Mathematics	Numbers	To begin to identify own mathematical problems based on own interests and fascinations.

## Addition and Subtraction

### Mental Calculations

40-60 Months	Mathematics	Numbers	To find the total of items in two groups by counting all of them. To begin to use the vocabulary involved in adding and subtracting in practical activities and discussion.
ELG	Mathematics	Numbers	To add and subtract two single-digit numbers and count on back to find the answer using quantities and objects.

### Solve Problems

ELG	Mathematics	Numbers	To solve problems, including doubling, halving and sharing.
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**Vocabulary:** *Addition, add, adding, combining, plus, more, sum, total, set, increase, bigger, greater, count on, put together, altogether, and, makes, equals, how many? Subtraction, subtract, take away, count back, reduce, reduction, left, less, less than, smaller, lesser, difference, find the difference, the difference between, fewer, lighter than, holds less than, costs less than, takes less time than, is younger than, is slower than, minus, leave, remove, younger than, takes less time.*

## **Measurement**

### **Describe, Measure, Compare and Solve**

40-60 Months	Mathematics	Shape, Space and Measure	To order two or three items by length or height. To order two items by weight or capacity.
ELG	Mathematics	Shape, Space and Measure	To use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and solve problems.

### **Vocabulary:**

**Measure:** size compare guess, estimate enough, not enough too much, too little too many, too few nearly, close to, about the same as just over, just under.

**Length:** length, metre, length, height, width, depth long, short, tall high, low wide, narrow thick, thin longer, shorter, taller, higher ... and so on longest, shortest, tallest, highest ... and so on far, near, close.

**Weight:** weight, weigh, weighs, balances heavy, light heavier than, lighter than heaviest, lightest scales.

**Capacity:** capacity, volume, full, empty, half full, holds, container

### **Telling the Time**

40-60 Months	Mathematics	Shape, Space and Measure	To use everyday language related to time. To order and sequence familiar events. To measure short periods of time in simple ways.
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**Vocabulary:** time, days of the week, Monday, Tuesday ... day, week birthday, holiday morning, afternoon, evening, night bedtime, dinner time, playtime today, yesterday, tomorrow before, after next, last now, soon, early, late quick, quicker, quickest, quickly slow, slower, slowest, slowly old, older, oldest new, newer, newest takes longer, takes less time hour, o'clock clock, watch, hands

## Money

40-60 Months	Mathematics	Shape, Space and Measure	To begin to use everyday language related to money.
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Vocabulary: money, coin, penny, pence, pound price, cost buy, sell spend

## Properties of Shapes

### Recognise 2D and 3D Shapes and their Properties

30-50 Months	Mathematics	Shape, Space and Measure	To show an interest in shape and space by playing with shapes or making arrangements with objects. To show interest in shape by sustained construction activity or by talking about shapes or arrangements. To show interest in shapes in the environment. To use shapes appropriately for tasks. To begin to talk about shapes in everyday objects, e.g. 'round' and 'tall'.
40-60 Months	Mathematics	Shape, Space and Measure	To begin to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes. To select particular named shapes
ELG	Mathematics	Shape, Space and Measure	To explore characteristics of everyday objects and shapes and use mathematical language to describe them.

Vocabulary: shape, pattern flat curved, straight round hollow, solid sort make, build, draw size bigger, larger, smaller symmetrical pattern, repeating pattern match

## **Compare and Classify Shapes**

30-50 Months	Mathematics	Shape, Space and Measure	To show awareness of similarities of shapes in the environment.
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**Vocabulary:** 2-D shape, corner, side, rectangle (including square) circle, triangle,

3-D shape, face, edge, vertex, vertices, cube, pyramid, sphere, cone

## **Position and Direction**

### **Position, Direction and Movement**

30-50 Months	Mathematics	Shape, Space and Measure	To use positional language
40-60 Months	Mathematics	Shape, Space and Measure	To describe their relative position, such as 'behind' or 'next to'.

**Vocabulary:** position, over, under above, below, top, bottom, side, on, in, outside, inside, around, in front, behind, front, back, beside, next to, opposite, apart, between, middle, edge, corner, direction, left, right, up, down, forwards, backwards, sideways, across, next to, close, near, far, along, through, to, from, towards, away from, movement, slide, roll, turn, stretch, bend, whole turn, half turn.

### **Patterns**

40-60 Months	Mathematics	Shape, Space and Measure	To use familiar objects and common shapes to create and recreate patterns and build models.
ELG	Mathematics	Shape, Space and Measure	To recognise, create and describe patterns.

**Vocabulary:** pattern puzzle what could we try next? how did you work it out?  
recognise describe draw compare sort

## **Statistics**

### **Record, Present and Interpret Data**

40-60 Months	Mathematics	Numbers	To record, using marks that they can interpret and explain.
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**Vocabulary: count, sort group, set, tally, list**