Maths in Early Years

Maths in Early Years involves children learning to explore number, shape and space and measures.

Numbers – children learn to count and the value of numbers, higher and lower. These skills support them to solve problems, use money and calculate more or less.

Shape, Space and Measure – these skills support children to understand size, weight, capacity, position, distance, time and money and compare quantities, objects and solve problems.

Maths will generally be linked to the topic work we are looking at, this gives the maths a real-life context.

Children learn about maths through play and their daily experiences. And the more meaningful to them and hands on it is, the better.

The environment (both indoors and out) is full of mathematical opportunities and has exciting things for children to explore, sort, compare, count, calculate and describe. We aim to support the children to be creative, critical thinkers, problem solvers and to have a go.

Progression of skills	AK 16-26 Months	BN 22-36 Months	AN 30-50 Months	BR 40-60 Months	AR Early Learning Goal	AR+ Exceeding
Number	I know that things exist, even when they are out of sight. I am beginning to organise and categorise objects, e.g. putting all the teddy bears together or teddies and cars in separate piles. I can say some counting words randomly.	I can select a small number of objects from a group when asked. I can join in with counting songs and rhymes I can recite some number names in sequence. I can create and experiment with symbols and marks representing ideas of number. I am beginning to make comparisons between quantities. I can use some language of quantities, such as 'more' and 'a lot'. I know that a group of things changes in quantity when something is added or taken away.	I can use some number names and number language spontaneously. I can use some number names accurately in play. I can say numbers in order to 10. I know that numbers identify how many objects are in a set. I can identify a number as a symbol. I am beginning to represent numbers using fingers, marks on paper or pictures. I can sort numbers from letters. I can sometimes match numeral and quantity correctly. I am curious about numbers and I make comments or ask questions. I can compare two groups of objects, saying when they have the same amount. I show an interest in number problems. I can separate a group of three or four objects in different ways, beginning to	I can recognise some numerals of personal significance. I can recognise numerals 1 - 5. I can recognise numerals 6 – 10. I can count up to three or four objects by saying one number name for each item. I can count actions or objects which cannot be moved. I can count objects to 10, and beginning to count beyond 10. I can count out up to six objects from a larger group. I can select the correct numeral to represent 1 to 5, then 1 to 10 objects. I can count an irregular arrangement of up to ten objects. I can order numbers 1 – 10 I can estimate how many objects they can see and checks by counting them. I can use the language of 'more' and 'less' to compare two sets of objects. I can find the total number of items in two groups by counting all of them.	I can count reliably with numbers from one to 20 forwards and backwards. I can use quantities and objects up to 20. I can place numbers in order up to 20. I can place numbers in order up to 20 from any given number I can say which number is one more or one less than a given number up to 20. I can identify missing numbers in a number line 1 - 20 I can recognise and name numbers 1 - 20 I can add two single-digit numbers and count on to find the answer. I can subtract two single-digit numbers and count back to find the answer. I can solve problems, including doubling, halving and sharing I can identify and represent numbers to 30 using objects and pictorial representations including the number line.	I can estimate a number of objects and checking qunatities by counting up to 20 I can solve practical problems that involve combining groups of 2, 5 or 10 or sharing into equal groups.

			recognise that the total is still the same. I show an interest in numerals in the environment. I show an interest in representing numbers. I understand that not only objects, but anything can be counted, including steps, claps or jumps. I can match quantities of the same amount. I can sort matching quantities of different arrangements. I can recognise arrangements of quantities up to 5.	I can say the number that is one more than a given number to 10. I can find one more or one less from a group of up to five objects, then ten objects. I am beginning to use the vocabulary involved in adding and subtracting in practical activities and discussion. I can use marks that I can interpret and explain to record my understanding. I am beginning to identify own mathematical problems based on own interests and fascinations.	I can use numicon to represent the teen numbers.	
Shape, Space and Measures	I can attempt, sometimes successfully, to fit shapes into spaces on inset boards or jigsaw puzzles. I can use blocks to create their own simple structures and arrangements. I enjoy filling and emptying containers. I associate a sequence of actions with daily routines. I am beginning to understand that things might happen 'now'.	I can notice simple shapes and patterns in pictures. I am beginning to categorise objects according to properties such as shape or size. I am beginning to use the language of size. I understand some talk about immediate past and future, e.g. 'before', 'later' or 'soon'. I can anticipate specific time-based events such as mealtimes or home time.	I can show an interest in shape and space by playing with shapes or making arrangements with objects. I can show awareness of similarities of shapes in the environment. I can sort 2D shapes I can sort objects by size (big/small) I can use positional language. I show an interest in shapes in the environment. I show an interest in shape by sustained construction activity or by talking about shapes or arrangements. I can use shapes appropriately for tasks.	I can order two or three items by length or height. I can order two items by weight or capacity. I can use everyday language related to time. I am beginning to use everyday language related to money. I can order and sequence familiar events. I can measure short periods of time in simple ways. I am beginning to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes. I can select a particular named shape.	I can use everyday language to talk about length to compare quantities and objects and to solve problems. I can measure length using non-standards units. I can use everyday language to talk about height to compare quantities and objects and to solve problems. I can measure height using non-standards units. I can use everyday language to talk about weight to compare quantities and objects and to solve problems. I can measure weight using non-standards units I can use everyday language to talk about capacity to compare	I can estimate, measure, weigh, compare and order objects I can talk about properties and position and time

			I am beginning to talk about the shapes of everyday objects, e.g. 'round' and 'tall'. I can match shapes in pictures and patterns. I can use 2D shapes to create pictures and patterns I can name some 2D shapes (triangle, rectangle, circle, square) I can talk about some of the features of 2D shapes (sides, corners, flat)	I can describe my relative position such as 'behind' or 'next to'. I can use familiar objects and common shapes to create and recreate patterns and build models.	quantities and to solve problems. I can measure capacity using non-standards units I can use everyday language to talk about position and distance to compare quantities and objects and to solve problems. I can use everyday language to talk about money to compare quantities and to solve problems. I can recognise the days of the week. I can order days of the week. I can use language related to time. I can recognise and name 3D shapes. (cube, pyramid, sphere, cone, cuboid) I can talk about the features of 3D shapes (faces, edges, solid)	