

EYFS Maths - Knowledge and skills progression

Our teaching of Maths reflects the White Rose Maths scheme. This is used as a planning tool, but we adapt according to the needs of our children. Pupils explore maths, using mathematical vocabulary to reason and explain their findings. Our curriculum allows children to better make sense of the world around them relating pattern between mathematics and everyday life. Teachers teach the skills needed to succeed in mathematics, providing examples of good practice and high expectations. We create a rich environment, where talk for maths is a key learning tool for all pupils. There are opportunities for our children to explore and develop their mathematics throughout our learning environment, inside and outside. Adults are skilled at encouraging mathematical opportunities through children's play and will challenge where this is a focus for the child's next step.

Maths	Autumn	Spring	Summer
Number	ELG: - 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		
	-Begin to Subitise 1 to 3 items. -Represent 1 - 5 in a variety of ways e.g. on fingers, on a fives or tens frame, with objects, with numicon cubes, digits, tally, a picture, dots on dice, money. -Begin to explain the composition of numbers (numbers within numbers) with support of visual aids such as tens frames, cubes, objects and Numberblock characters -Begin to recognise parts within numbers. E.g. Look at 4 buttons and say "I can see a group of 2 and another group of 2" -Begin to use a 5-frame model. -Some exposure to number doubles e.g through Numberblocks, one and another one makes two. - begin to correctly form numbers 0-5	-Begin to recall number bonds to 5 and some corresponding subtraction facts. -Subitise to 4. -Begin to subitise amounts on a dice and on a tens frame. -Represent 5-10 in a variety of ways e.g. on fingers, on a fives or tens frame, with objects, with numicon, cubes, digits, tally, a picture, dots on dice, money. - begin to correctly form 6-9 -Partition amounts into equal groups. -Double numbers 1-10 using concrete objects. -Discuss composition of numbers to 10, showing some automatic recall of number facts. E.g I can make 6 with $3 + 3$ or $4 + 2$ -Use a tens frame model to represent numbers to 10 and some addition and subtraction sums, with support.	-Confidently subitise rather than count small groups of objects. - Subitise to 5 using familiar concept images (e.g. a tens frame, with Numicon, on a dice, and using fingers -Double numbers 1-5 confidently and begin to recall some double facts from memory. -Add 2 single digit numbers using known number facts or number line. -Write addition and subtraction number sentences. -Recall number bonds to 5 automatically and some number bonds to 10

		-Use a part, whole model with concrete objects to partition and recombine an amount. -Combine 2 groups of concrete objects and write addition number sentences with support.	
Numerical Pattern	ELG: - Verbally count beyond 20, recognising the pattern of the counting system. - Compare quantities up to 10 in different contexts, recognizing 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.		
	-Join in with number songs, attempting to represent numbers using fingers where appropriate. -Recite numbers to 10 or beyond. -Demonstrate understanding that we use one number for each item, when counting. -Attempt to count objects, actions and sounds to 10 accurately. -Use and understand the term "more" in practical contexts. -Begin to link each number to 5 with its cardinal number value. -Know that the last number reached when counting is the total. -Begin to understand the concept of 1 more and 1 less with concrete objects to 5. -Order numbers 1-5	-To be able to make representations of number rhymes. Show me 5 current buns, but 1 is taken away. -Order numbers to 10 - Confidently count back from 10. -Demonstrate understanding of the cardinal principle when counting objects. Show accuracy when counting a group of up to 5/10 objects. -Begin to compare numbers and quantities up to 10 using and understanding the terms more than, greater than, fewer, less than in practical contexts - Understand the term equal when comparing two groups of objects. -Begin to understand the concept of 1 more and 1 less using a number line, to 10. - Recite numbers to 20 confidently. -Begin to count back from 20 with support and visual aid such as a number line. -Begin to count in 2s with support.	-Show accuracy when counting a group of objects, showing 1 to 1 correspondence & confident application of the cardinal principle. -Say the number one more/less than a given number 1 - 10. -Explore sharing into equal groups in practical contexts, commenting on what they notice. -Exposed to counting in 5s and 10s, with support. - Recite numbers to 20 and back from 20. -To begin to work out 1 more/1 less than a number up to 20 using a preferred method: mentally, using objects or on a number line. -Count on from a given number to 20 and back from a given Number 0 - 10. -Recognise numbers 1-20 and out of order.

Shape, Space and Measure	This is not within the ELG: targets created to underpin the Year 1 National Curriculum. - Use everyday language to discuss length, size, height, weight, time, position and capacity. Use this language to make simple observations, e.g. this is heavier than that. - Shape - Understand and use correct mathematical language to describe 2D and 3D shapes (e.g. vertices, sides, edges, faces, flat/curved). - Shape - Know some common 2D and 3D shapes. - Pattern - create, copy and continue a simple pattern		
	Describe the size or shape of real-life objects using simple mathematical vocabulary, e.g. big/little, large/small, round/straight. -Name 2D shapes and explain their properties using mathematical language e.g sides, corners -Sorting/matching - sort groups of objects according to different criteria e.g by colour, size and shape -Follow prepositional instructions through games and songs like Simon says, Hokey Cokey, Where's the bear? -Time - understand first/next -Time-able to talk about the passing of time through own Experiences -Pattern- Begin to continue, copy and create AB patterns -Shape- Select, rotate and manipulate shapes to develop spatial reasoning skills through learning through play -Able to complete jigsaw puzzles independently.	- Time - Understand yesterday/today/tomorrow. -Time-Recite days of the week and months of the year. -Shape - Identify straight and curved sides on 2D shapes, and flat and curved faces on 3D shape -Measure - use and understand the terms shorter/taller, larger/smaller. Sequence4 items according to these criteria. -Begin to use and understand prepositional language such asn front of, behind of. -Pattern- Continue, copy and create AB, ABB and ABBC Patterns -Money- Begin to recognise some coins and their value. Count 1p coins in 1s and 2p coins in jumps of 2 with support. -Measure- measure and compare length using non-standard measures -Shape- Use shapes to make pictures/models.	- Demonstrate understanding of everyday prepositions - in, on, under, beside, in front, behind. -Follow prepositional language e.g. put Teddy inside the box. -Time - Use and understand before/after -Pattern - continue a simple AB, ABC pattern -Shape - Select, rotate and manipulate shapes to match a picture, fit an outline or create patterns. -Time- Have an understanding of what the day and the month is. -Shape- Name some 3D shapes and describe their properties using mathematical language. -Measure- Use Mathematical language when comparing length, weight and capacity.