Mathematics Curriculum End Points and Progression

End point : What an EYFS child needs to understand?	End point: What do they need to know? (Substantive / Disciplinary Knowledge), New Vocabulary.	How can we see that they are confident with Mathematics in Year R	Preparation for Year 1 Curriculum
Understand that subitising is recognising a quantity of objects without counting. Understand cardinality - the final number when counting is the total of that group.	To be able to subitise quantity to 5 and quantity of objects to 10 by subitising combinations of numbers eg 8 is 4 and 4. To be able to count a larger group of objects accurately with 1-1 corresponence and say the total.	Children will say a number for a quantity of objects to 10 without having to count them. Children will count groups of objects accurately.	White Rose Maths Year 1 Curriculum Addition and Subtraction, Place value units.
Understand that quantity can be compared and the comparative language used is more and less.	How to identify more or less in quantity of objects. How to identify one more and one less than a numeral to 10 then 20.	Children will be able to compare groups of objects by saying whether they are more or less. Children will say a number one more or one less than any number to 10 then 20.	White Rose Maths Year 1 Curriculum Place Value units.
To understand composition and that every number has number facts relating to it using addition and subtraction.	Numbers bonds to 10 instant recall. How to find number bonds for all numbers up to 10 using a tens frame or part whole model.	Children will be able to say any number bond to 10. Children will confidently use a tens frame or part whole model to find number facts of any number to 10. Children will recognise signs + / - / =	White Rose Maths Year 1 Curriculum Addition and Subtraction units.

Mathematics Curriculum End Points and Progression

	Use term number sentence, learn addition and subtraction signs and recognise equality.		
Understand that every quantity has a numeral to match.	To recognise and write numerals to 10.	Children will represent quantity using the correct numeral to 5, 10 then 20 using a number line to support if necessary.	
Understand that every two-digit number to 20 is composed of a ten and some ones or units.	How to partition a teen number into tens and ones or units.	Children will be able to discuss how a teen number is partitioned into tens and ones or units in a range of contexts.	White Rose Maths Year 1 Curriculum Place Value units.
Understand that some quantities of objects can be shared equally.	How to share objects equally by doing this practically. How some quantities of objects will have a left over.	Children will share objects equally in a range of contexts and recognise when there are left overs.	White Rose Maths Year 1 Curriculum Multiplication and Division units.
Understand that numbers can be labelled as odd or even.	How to put objects in pairs to see if the quantity is an even number or have one left over and are therefore odd. To recognise even and odd numbers in numicon pieces.	Children will be able to check if a number is odd or even. Children will know if a numicon piece is odd or even.	White Rose Maths Year 1 Curriculum Place Value units. Problem Solving Rules and Patterns
Understand that doubling means to add together two of the same number.	How to practically work out the double of numbers to 10. To recall doubling facts to 5 instantly.	Children will be able double objects in a range of contexts. Children will say a doubling fact to 5.	White Rose Maths Year 1 Curriculum Addition and Subtraction units.

Mathematics Curriculum End Points and Progression

Understand that different shapes have names and properties.	How to recognise 2D shapes - **triangle, square, circle and rectangle.** How to recognise 3D shapes – **cylinder, cone, sphere, cube, cuboid, pyramid.** How to describe the above shapes using mathematical vocabulary – **vertex, vertices, sides, edges, straight, curved, equal.** How to **translate** and **rotate** a shape and explore shapes within shapes.	Children will name and discuss properties of shapes as they build, create, explore and play with different shapes in the environment.	White Rose Maths Year 1 Curriculum Shape units.
Understand that when objects are placed together in a certain way they create pattern which can then be repeated.	How to create a pattern and describe it. How to repeat a pattern.	Children will recognise and talk about patterns in the environment and be able to describe how they repeat. Children will create pattern in their play and repeat them when asked.	White Rose Maths Year 1 Curriculum Shape units. Problem Solving – Rules and Patterns
Understand that all objects have length, height, capacity and weight and can be compared.	To use correct mathematical language to compare: Length – long, short, er, est Height – tall, short, er, est Capacity – full, empty, space	Children will discuss and compare height, length, capacity, weight and distance using correcy language. Children will recognise a range of measuring equipment in their exploration and play activities and	White Rose Maths Year 1 Curriculum Length and Height, Mass and Volume units.

Mathematics Curriculum End Points and Progression

	Weight – heavy, light, er, est, equal Distance – further, farthest, near, close, closest How to use a ruler and metre stick to measure longer than / shorter than. How to use pan balance scales to compare weight. How to use number of cups to measure capacity.	correct language will be modelled to them.	
Understand that positional language is used to describe where an object is placed.	How to use positional language accurately: **above, below, next to, behind, in front of, on top of, underneath, opposite, between.**	Children will accurately follow instructions to place objects in different contexts. Children will be able to describe where an object is in different contexts.	White Rose Maths Year 1 Curriculum Position and Direction units.
Understand that knowledge they have can be used to solve problems.	How to solve a range of problems: **Word problems, Generalising, Visual problems and diagrams, Logic, Finding all possibilities, Rules and patterns**	Children will use the knowledge they have to try and solve problems. Children will persevere and try different ideas to solve problems.	Problem Solving – Word Problems, Generalising, Visual Problems and diagrams, Logic Problems, Finding all possibilities, Rules and Patterns

Mathematics Curriculum End Points and Progression

Understand that money is the currency we use to buy things.	How to use money to exchange for items in a shop situation. How to recognise the value of some coins and match this with pennies. How some situations will require change to be given when paying for an item.	Children will role play paying for items and giving change.	White Rose Maths Year 1 Curriculum Money unit.

Development Matters

- Count objects, actions and sounds.
- Subitise.
- Link the number symbol (numeral) with its cardinal number value.
- Count beyond ten.
- Compare numbers.
- Understand the 'one more than/one less than' relationship between consecutive numbers.
- Explore the composition of numbers to 10.
- Automatically recall number bonds for numbers 0-5 and some to 10.
- Select, rotate and manipulate shapes to develop spatial reasoning skills.
- Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.
- Continue, copy and create repeating patterns.
- Compare length, weight and capacity.

ELG

Number

- Have a deep understanding of number to 10, including the composition of each number.
- Subitise (recognise quantities without counting) up to 5

Mathematics Curriculum End Points and Progression

- 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.

Numerical Patterns

- 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.