



Mathematics in Early Years

Mathematical Vocabulary			
	Area	Statement	Provision at Forestdale
Three and Four-Year-Olds	Communication and Language	Use a wider range of vocabulary. Understand 'why' questions, like: "why do you think the caterpillar is so fat?"	We explore mathematical vocabulary through play. We provide experiences for children to use or hear the vocabulary associated with maths.
Reception	Communication and Language	Learn new vocabulary. Use new vocabulary throughout the day	We teach new vocabulary through White Rose Maths. Children are taught what it means and it is modelled by all adults whenever possible.
Early Learning Goal	Communication and Language	Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary	Children are given the opportunity to offer their own ideas in every maths lesson. Recently used vocabulary is modelled consistently by all adults.

Number and Place Value			
Counting			
	Area	Statement	Provision at Forestdale
Three and Four-Year-Olds	Mathematics	Recite numbers past 5. Say one number name for each item in order: 1, 2, 3, 4, 5. Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').	Children participate in small group sessions for maths where numbers 1-5 are explored using Maths Mastery and WRM techniques. Continuous provision support these skills in child initiated play.
Reception	Mathematics	Count objects, actions and sounds. Count beyond ten	Children are taught to recite numbers to 10 daily in the first term of Reception. We support children's 1:1 correspondence when counting objects. Continuous Provision supports developing these skills in CI play.

Early Learning Goal	Mathematics	Verbally count beyond 20, recognising the pattern of the counting system.	Children are taught to verbally count up to and beyond 20 from Spring Term 1.
Identifying, Representing and Estimating Numbers			
Three and Four-Year-Olds	Mathematics	Fast recognition of up to 3 objects, without having to count them individually ('subitising'). Show 'finger numbers' up to 5. Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. Experiment with their own symbols and marks as well as numerals.	Children are taught skills to support learning how to subitise. Children are exposed to pictures containing up to three items as much as possible – this way they learn what it looks like subconsciously. Children are regularly encouraged to make marks in any form.
Reception	Mathematics	Subitise. Link the number symbol (numeral) with its cardinal number value.	Children will be taught the principles of subitising and some techniques to support them in learning how to do it. They will learn to group objects to support them in subitising numbers to 5. Children will be taught about numerals and their quantities from Autumn 2 in Reception when we look at a number per week through the White Rose Maths scheme.
Early Learning Goal	Mathematics	Subitise (recognising quantities without counting) up to 5.	Children will be knowledgeable in subitising when we complete the EYFSP during the summer term.
Reading and Writing Numbers			
Three and Four-Year-Olds	Mathematics	Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. Experiment with their own symbols and marks as well as numerals.	Children will be taught 1:1 correspondence to enable them to match numerals and quantities with ease. Children will be encouraged to make marks that represent numbers and tallies.

Reception	Mathematics	Link the number symbol (numeral) with its cardinal number value.	Children will be taught the skills that enable them to link cardinal number value to a numeral. They will use skills taught in Nursery and we will build on speed and subitising.
Compare and Order Numbers			
Three and Four-Year-Olds	Mathematics	Compare quantities using language: 'more than', 'fewer than'.	Teachers will model language consistently and correctly within the classroom. Children will be taught specific language and encouraged to use it in the right context.
Reception	Mathematics	Compare numbers.	Children will be encouraged to compare all types of numbers in different ways – smaller, larger, and when they are the same.
Early Learning Goal	Mathematics	Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.	We will move on from more and fewer and begin to compare specific numbers, we will discuss the difference between the numbers, we will talk about the larger and the smaller number, how does this look when they are objects?
Understanding Place Value			
Reception	Mathematics	Understand the 'one more than/one less than' relationship between consecutive numbers. Explore the composition of numbers to 10.	We will revisit one more and one less several times over the reception year. We will complete different tasks to secure our understanding and knowledge. We will look at physically adding and taking away to support developing our concrete knowledge. We will explore how numbers to 10 are made up. We will learn about number bonds of lots of different numbers.

Early Learning Goal	Mathematics	Have a deep understanding of numbers to 10, including the composition of each number.	
Solve Problems			
Three and Four-Year-Olds	Mathematics	Solve real world mathematical problems with numbers up to 5	Children will experience lots of situations where they can explore real life problems involving maths. Maths is regularly incorporated into the children's role play to encourage them to problem solve.

Addition and Subtraction			
Mental Calculations			
	Area	Statement	Provision at Forestdale
Reception	Mathematics	Automatically recall number bonds for numbers 0-10.	We will work really hard when trying to recall number bonds to 10. We will use lots of different methods to help us remember them.
Early Learning Goal	Mathematics	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.	We will teach children methods to help them work out answers without having to rely on rhymes or physical objects. Children will become more confident in recalling facts about numbers through lots of practise within class.

Solve Problems			
Early Learning Goal	Mathematics	Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed evenly.	Children will learn how to spot patterns within numbers to 10. They will use Numicon to support them in understanding odds and evens, we will also use Numberblocks to develop this further.

Measurement			
Describe, Measure, Compare and Solve (All Strands)			
	Area	Statement	Provision at Forestdale
Three and Four Year Olds	Mathematics	Make comparisons between objects relating to size, length, weight and capacity.	Children will have regular access to things that support measuring skills. In classrooms you will find: • Rulers, tape measures • Scales – digital, mechanical and balance • Jugs, buckets, tubs, • Measuring cups These things will be used to help all children in EY to develop their measuring skills. Staff will model the appropriate language during play with the children. Staff will pose different questions to the children – depending on year group and level of understanding – that will help further their knowledge and skills.
Reception	Mathematics	Compare length, weight and capacity.	
Telling the Time			
Three and Four Year Olds	Mathematics	Begin to describe a sequence of events, real or fictional, using words, such as ‘first’, ‘then...’	All children in EY use a visual timetable. They will use mathematical language to describe their own day. They will also develop their language skills within literacy and story-telling.

Reception	Mathematics		Children in reception will learn how to recognise the numbers on a clock and how it relates to time telling and the hours in the day. Children will learn the o'clock on a clock.
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Properties of 2D Shapes

Recognise 2D and 3D Shapes and their Properties

	Area	Statement	Provision at Forestdale
Three and Four Year Olds	Mathematics	Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners', 'straight', 'flat', 'round'. Select shapes appropriately: flat surfaces for a building, a triangular pattern for a roof, etc. Combine shapes to make new ones – an arch, a bigger triangle, etc.	Children have access to shapes in their continuous provision play. They will be encouraged to use them in their creations – Tap A Shape, Numicon boards. They will learn about the simple properties of shapes they are using. Children will also have access to blocks and bricks – they will be encouraged to talk about what shapes they are using and why. Adults will model building skills for children to mimic.
Reception	Mathematics	Select, rotate and manipulate shapes in order to develop spatial reasoning skills.	Children will be encouraged to use different shapes in their creations in the building and creative areas. Adults will model how to rotate and manipulate their shapes to get a desired effect.

Compare and Classify Shapes

Reception	Mathematics	Compose and decompose shapes so that children can recognise a shape can have other shapes within it, just as numbers can.	Children in Reception complete teacher led activities that support these skills.
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Position and Direction

Position, Direction and Movement			
	Area	Statement	Provision at Forestdale
Three and Four Year Olds	Mathematics	Understand position through words alone – for example, “The bag is under the table,” – with no pointing. Describe a familiar route. Discuss routes and locations, using words like ‘in front of’ and ‘behind’.	We will use lots of stories in EY to support the children’s learning of positional language. We will also complete Wellcomm assessments and interventions to support this concept/language learning and understanding.
Reception	Understanding the World	Draw information from a simple map.	We explore maps regularly throughout the year – starting off with simple ones moving onto more complex information. Children will be able to spot a symbol and explain the meaning, they will also be able to differentiate between road, path, and grass.
Patterns			
Three and Four Year Olds	Mathematics	Talk about and identify the patterns around them. For example, stripes on clothes, designs on rugs and wallpaper. Use informal language like ‘pointy’, ‘spotty’, ‘blobs’, etc. Extend and create ABAB patterns – stick, leaf, stick, leaf. Notice and correct an error in a repeating pattern.	Children regularly go on welly wood walks where they are encouraged to notice things in the world around them. This prepares children to talk about patterns they spot. Children will be exposed to patterns within their indoor environment where an adult will facilitate the conversation and model the appropriate language. Children will also be encouraged by adults to create patterns when playing with blocks, bricks and loose parts.
Reception	Mathematics	Continue, copy and create repeating patterns.	Children will have lots of opportunities to develop their understanding of pattern. We look at natural patterns, shapes in patterns, colour patterns. We extend learning to look at more complex 3/4 step patterns.

Statistics

Record, Present and Interpret Data

	Area	Statement	Provision at Forestdale
Three and Four Year Olds	Mathematics	Experiment with their own symbols and marks, as well as numerals.	Children will be encouraged to make their own marks and give them meanings. Children naturally enjoy tallying and ticking things as they go, so we ensure that they have clipboards and paper to explore this.
Reception	Mathematics		Children in Reception are taught how to tally and make marks to represent data. We complete pictograms and simple bar charts. We use daily class data to count out how much fruit, toast and milk we need.