



Science in Early Years

	Area	Statement	Provision at Forestdale
Three and Four-Year-Olds	Communication and Language	Understand 'why' questions, like: "Why do you think the caterpillar got so fat?"	We use stories to support vocabulary learning so that children can answer questions. We use verbal and picture cues to support children when answering questions.
	Physical Development	Make healthy choices about food, drink, activity and tooth brushing.	We explore topics like this through play and stories. We often have play trays exploring these concepts for the children to explore, for example, teeth brushing, washing/bathing the babies. We have cooking activities that are always based around healthy choices.
	Understanding the World	Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary. Begin to make sense of their own life-story and family's history. Explore how things work. Plant seeds and care for growing plants. Understand the key features of the life cycle of a plant and an animal. Begin to understand the need to respect and care for the natural environment and all living things. Explore and talk about different forces they can feel. Talk about the differences between materials and changes they notice.	We provide stimulating natural environments for children to explore freely. We make and talk about collections of natural materials, we explore the names and textures of these items. We encourage children to talk about what they see in the natural world – we discuss any changes to the outdoor area that they have noticed. We model observational skills to the children, "I can see that", "I wonder if..." We explore life cycles by watching caterpillars grow and turn into butterflies. We have planters outside that have been filled by the children, they then watch them grow and look after them. This is added to each year so every cohort gets the opportunity to plant seeds and grow flowers/plants. Children are exposed to the vocabulary surrounding forces, staff draw children's attention to forces they may see around them – resistance when pushing the boat under the water, magnetic attraction.

Reception	Communication and Language	Learn new vocabulary. Ask questions to find out more and to check what has been said to them. Articulate their ideas and thoughts in well-formed sentences. Describe events in some detail. Use talk to work out problems and organise thinking and activities. Explain how things work and why they might happen. Use new vocabulary in different contexts.	We explore new vocabulary through stories and play. We ask simple questions of the children, throughout the year we begin to build on these questions and explore longer and more scientific answers. Adults model answers for the children constantly so they can begin to form their own. We encourage child interest and opinions when talking. We explore how things work and why things happen in lots of different areas of learning, for example – the change in seasons, how we use technology.
	Physical Development	Know and talk about the different factors that support their overall health and wellbeing: - regular physical activity - healthy eating - tooth brushing - sensible amounts of 'screen time' - having a good sleep routine - being a safe pedestrian	We explore these areas of science through topics such as "Healthy Me!", "Oral Health" and "Road Safety". We model sensible amounts of screen time when we use the iPad, children are monitored when using them to ensure they are not on them for over 15 minutes at a time. We have outdoor provision and PE lessons to explore physical activity and the effects it has on our body.
	Understanding the World	Explore the natural world around them. Describe what they see, hear and feel while they are outside. Recognise some environments that are different to the one in which they live. Understand the effect of changing seasons on the natural world around them.	We revisit and explore some of the same scientific concepts and vocabulary as Nursery throughout the year, building on the children's questioning skills and knowledge. We encourage children to use their senses when they are outside – "what does it smell like?" "what does it feel like?" "what can you hear?" We teach children skills such as exploring, observation, describing, comparing and contrasting, recording and sorting. We model close observation, we ask children to draw pictures of what they can see, we point out details for the children so they have the opportunity to "look closer" at everyday objects. We model ways of sorting things into categories – children learn

			how to name and describe the categories. We teach children about a range of contrasting environments around the world – we look at different habitats of animals and how they are suited to this habitat, we look at how the weather is different in other parts of the world and compare it to England. We share fiction texts that may help us explore a concept in an exciting way, we also expose children to non-fiction texts that offer real life pictures and information. We explore all of the seasons throughout the year – we explore each as it is happening so make the experience real life, we also use stories to help us explore and understand the seasons. We discuss the weather that we can see outside.
Early Learning Goal	Communication and Language	Make comments about what they have heard and ask questions to clarify their understanding.	Children are encouraged throughout FS to talk about what they have seen and heard. Children will be encouraged to ask lots of different questions to find out what they want to know. Adults model the different types of questions during play and carpet learning so that children are exposed. Children have lots of opportunities to ask questions throughout their day.

	Physical Development	Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices.	We encourage children to independent in their self-care towards the end of Reception. We partner with the parents to teach children the skills they need to be able to be independent in some areas. We encourage healthy eating and choices throughout the whole school, children will become more independent in making these choices. We look at the importance of healthy eating throughout the year and explore what unhealthy choices can do to our bodies.
	Understanding the World	Explore the natural world around them, making observations and drawing pictures of animals and plants. Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class. Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.	Adults will model observational skills for the children, questioning will explore deeper concepts such as why something happens – children will need to draw on their knowledge or experiences to support their answers. Children will have the opportunity to explore important processes such as what plants and flowers need to grow. Children will have the opportunities to draw and label plants, they will be taught the names of the flowers that are familiar to them. Children will have explored physical processes such as melting, freezing and shadows. Children will be taught how each of these processes occur and will have the chance to explore them during play and in the natural world.