

Understanding the World - The Natural World (Science)

ELG

- 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.

Focus	Plants	Animals, including humans	Everyday Materials	Seasonal Changes
Nursery 3 & 4 year olds will be learning to...	<ul style="list-style-type: none"> • Plant seeds and care for growing plants (concept of growth and decay) • Understand the key features of the life cycle of a plant • Observe plants closely through a variety of means e.g. magnifiers & photographs • Extend vocabulary: leaves, petals, roots, bulb, trunk, branches, stem, garden plants, wild plants, seeds • 	<ul style="list-style-type: none"> • Begin to understand the need to respect & care for the natural environment & all living things • Identify familiar animals • Name and describe some animals • Understand the key features of a life cycle • Explore senses 	<ul style="list-style-type: none"> • Explore collections of materials with similar and/ or different properties • Make comparisons between different materials and their properties 	<ul style="list-style-type: none"> • Talk about what they see, using a wide vocabulary. • Daily weather discussions • Sing songs and rhymes about the natural world around us. • Discuss seasons as children experience them throughout the year.
Reception 4 & 5 year olds will be learning to...	<ul style="list-style-type: none"> • Talk about things they have seen outside including plants • Name & describe some plants • Identify familiar plants • Draw pictures of plants • Talk about things they have seen outside including plants 	<ul style="list-style-type: none"> • Describe what they see, hear & feel whilst outside (senses) • Explore food chains and introduce children to herbivores, omnivores and carnivores • Observational drawings of animals and plants • Discuss how we care for the natural world around us. • Talk about things they have seen outside including animals 	<ul style="list-style-type: none"> • Explore and talk about the forces they experience/feel when exploring. (push, pull, magnets, attract, repel). • Explore sinking and floating. • Investigate which materials sink and float. Explain why. • Explore changes in materials and differences between them. • Experiment with changes in materials (cooling, heating, melting, freezing, ice cubes, snow, cooking) • Investigate shadows and light and dark. 	<ul style="list-style-type: none"> • Encourage children to observe how animals behave differently as the seasons change • Daily weather discussions and comparisons with countries around the world. • Discuss and compare seasons as children experience them throughout the year. • Understand the effect of changing seasons on the natural world around them (weather and seasonal features)

Term	Autumn 1 All about me	Autumn 2 Park, Gardens and Christmas	Spring 1 Traditional Tales	Spring 2 Growing	Summer 1 Transport	Summer 2 Dinosaurs
Focus	Animals including humans		Everyday Materials	Plants	Everyday Materials	Animals
	Seasonal Changes - Discussions regarding the weather and seasons happen daily through the morning calendar routine. The weather song is sung daily as well as the months of the year. We discuss what season the month is in and how do we know. When the children access the outside learning environment, we have discussions about needed their coat or not due to temperature as well as discussions about the growing areas.					
Nursery Key Texts	<ul style="list-style-type: none"> 📖 Colour Monster starts school. 📖 Brown Bear What do you see? 📖 Polar bear, Polar bear What do you hear? 	<ul style="list-style-type: none"> 📖 Pumpkin Soup 📖 Handa's Surprise 📖 Going on a bear hunt 📖 Clean up 📖 The Nativity 📖 Dear Santa 	<ul style="list-style-type: none"> 📖 Goldilocks and three bears 📖 Little Red Riding Hood 📖 Three little pigs 📖 Elves and the shoemaker 	<ul style="list-style-type: none"> 📖 Titch 📖 The very hungry caterpillar 📖 Non-Fiction Lifecycle books 📖 Oliver's Vegetables 	<ul style="list-style-type: none"> 📖 Train ride 📖 Mr. Gumpy's motor car 📖 Noah's Ark 	<ul style="list-style-type: none"> 📖 Harry and his bucketful of dinosaurs 📖 Dear dinosaur 📖 Am I yours?
Nursery Learning Intentions	<ul style="list-style-type: none"> • We are learning to explore our senses. • We are to name and describe some animals. • We are learning to identify familiar animals. 	<ul style="list-style-type: none"> • We are learning to respect & care for the natural environment & all living things. • Daily weather discussions and comparisons with countries around the world. 	<ul style="list-style-type: none"> • We are learning to explore collections of materials with similar and/ or different properties. • We are learning to make comparisons between different materials and their properties. 	<ul style="list-style-type: none"> • We are learning to care for growing plants. • We are learning the key features of the life cycle of a plant. • We are learning to observe plants closely. 	<ul style="list-style-type: none"> • We are learning to name and describe some animals. • We are learning to identify familiar animals. 	<ul style="list-style-type: none"> • We are learning to carry out an experiment.
Activities	Name the animals in Brown Bear what do you see and be able to identify them Explore the senses tasting fruit skewers, listening for sounds in the environment linked to text see and hear.	Visit the Forest school for going on a bear hunt, talk about what we can see. Make bird feeders for the forest school and discuss how we look after the wild animals.	Making houses from different materials linked to three little pigs. Talk about shoes and what different shoes are made from and why. Have a shoe shop to role play.	Plant a sunflower seed to take home and keep a diary. Have caterpillars in the classroom and learn about the lifecycles of butterflies, frogs and seeds. Do observational drawings of the caterpillars	Name and identify the animals in Mr Gumpy's motor car as well as the animals going into the ark.	Freeze dinosaurs in ice and the children investigate the ice and have a discussion about why it melts. Develop vocabulary of Herbivore, Carnivore And omnivore.
Reception Key Texts	<ul style="list-style-type: none"> 📖 Owl Babies 📖 Funny Bones 📖 Here We Are 📖 All kinds of Families 📖 All kinds of People 📖 My Five Senses 	<ul style="list-style-type: none"> 📖 The Gruffalo 📖 Tidy 📖 Leaf Man 📖 The Nativity 	<ul style="list-style-type: none"> 📖 The Gingerbread Man 📖 The Gingerbread Girl 📖 The Three Billy Goats Gruff 📖 Troll Poem 	<ul style="list-style-type: none"> 📖 Jaspers Beanstalk 📖 The Ugly Duckling 📖 Sam's Seed 📖 Lifecycle non-fiction books. 	<ul style="list-style-type: none"> 📖 Lost and Found 📖 Mr. Gumpy's Outing 📖 Amelia Earhart 📖 Whatever Next 📖 Oi Get off our Train 📖 George Saves the World by Lunchtime 	<ul style="list-style-type: none"> 📖 Cake-o-Saurus Poem 📖 Dinosaur non-fiction books. 📖 Harry and the Bucketful of Dinosaurs. 📖 A Girl Called Mary

Reception Learning Intentions	<ul style="list-style-type: none"> We are learning to observe how animals behave differently as the seasons change. We are learning to use know what our senses are and how to use them in different environments. We are learning to investigate shadows and light and dark. 	<ul style="list-style-type: none"> We are learning to talk about things we have seen outside including plants. We are learning to care for the natural world around us. We are learning to talk about the seasons. We are learning to know the effect of changing seasons on the natural world. We are learning to talk about the forces push, pull, magnets, attract, repel. 	<ul style="list-style-type: none"> We are learning to talk about things we have seen outside including plants We are learning about changes in materials. 	<ul style="list-style-type: none"> We are learning to name & describe plants We are learning to identify familiar plants We are learning how to draw pictures of plants We are learning to talk about things we have seen outside including plants. We are learning to care for the natural world around us. We are learning to talk about the seasons. We are learning to know the effect of changing seasons on the natural world. 	<ul style="list-style-type: none"> We are learning about suitable materials to make a boat and why some materials are better than others We are learning to talk about the seasons. We are learning to know the effect of changing seasons on the natural world. 	<ul style="list-style-type: none"> We are learning what a food chain is. We are learning what herbivores; omnivores and carnivores are. We are learning to investigate shadows and light and dark.
Activities	<p>Through the story owl babies introduce woodland animals and hibernation. Learn about light and dark through the funny bones story and also the difference between day and night. Draw around their own shadows on the playground with chalk Learn about the human skeleton through the story funny bones.</p>	<p>Autumn walk - to observe seasonal changes and conduct a litter pick. Through the story Tidy conduct a circle time to explore the importance of looking after the environment. Visit the Forest School and make bird feeders. The children will investigate magnets through</p>	<p>Winter Walk - to observe seasonal changes Make bread in R.E. and learn about the changes in ingredients Make Gingerbread and learn about the changes in ingredients.</p> <p>STEAM project design, build and test a Gingerbread Man trap.</p>	<p>Spring Walk - to observe seasonal changes Plant a bean for Jaspers Beanstalk and keep a diary of the lifecycle. Conduct observational drawing of the lifecycle. Science Week - Lifecycle of a duck, have eggs hatch and learn how to look after the ducks. Keep a diary and do observational drawing of the ducks.</p>	<p>Summer Walk and mini beast hunt using bug nets and magnifying glasses. Exploring floating and sinking STEAM project design, build and test a boat for Mr Gumpy and his friends. Exploring appropriate materials. George saves the world by lunchtime - reduce, reuse and recycle. Conservation and plastic in the ocean.</p>	<p>Names of dinosaurs. What is a herbivore, carnivore and omnivores and which dinosaurs are which. Introduce food chains. Discuss the ice age, conduct a science experiment what would melt ice the quickest? What makes an experiment fair Record what happens Explore dinosaur fossils and Palaeontologist Mary Anning</p>

