



Bunwell Primary School EYFS Science Plan

2021-2023



In planning and guiding what children learn, practitioners must reflect on the different rates at which children are developing and adjust their practice appropriately, referring to the Characteristics of Effective Teaching and Learning

These are: **playing and exploring** – children investigate and experience things, and ‘have a go’; **active learning** – children concentrate and keep on trying if they encounter difficulties, and enjoy their achievements for their own sake; **creating and thinking critically** – children have and develop their own ideas, make links between ideas, and develop strategies for doing things.

In addition, the **Prime Areas of Learning (Personal, Social and Emotional Development, Communication and Language and Physical Development)** underpin and are an integral part of children’s learning in all areas.

EYFS The Natural World Educational Programme (Statutory)

Understanding the world involves guiding children to make sense of their physical world and their community. The frequency and range of children’s personal experiences increases their knowledge and sense of the world around them – from visiting parks, libraries and museums to meeting important members of society such as police officers, nurses and firefighters. In addition, listening to a broad selection of stories, non-fiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support understanding across domains. Enriching and widening children’s vocabulary will support later reading comprehension.

EYFS Science Skills

Biology	Chemistry	Physics
<ul style="list-style-type: none">• Create opportunities to discuss how we care for the natural world around us.• Offer opportunities to sing songs and join in with rhymes and poems about the natural world.• After close observation, draw pictures of the natural world, including animals and plants.• Name and describe some plants and animals children are likely to see, encouraging children to recognise familiar plants and animals whilst outside.• Teach children about a range of contrasting environments within both their local and national region.• Model the vocabulary needed to name specific natural features of the world.• Share non-fiction texts that offer an insight into contrasting environments.• Listen to how children communicate their understanding of their own environment and contrasting environments through conversation and in play.• Share with children how our body grows and learn to name body parts• Teach children how to keep our body healthy	<ul style="list-style-type: none">• Observe and interact with natural processes, such as ice melting, light travelling through transparent material, an object casting a shadow, a magnet attracting an object.	<ul style="list-style-type: none">• Observe and interact with natural processes, such as a sound causing a vibration, light travelling through transparent material, an object casting a shadow, a magnet attracting an object and a boat floating on water.

Scientific Enquiry (also linked to CofEL)

- Provide children with have frequent opportunities for outdoor play and exploration.
- Encourage interactions with the outdoors to foster curiosity and give children freedom to touch, smell and hear the natural world around them during hands-on experiences.
- Encourage focused observation of the natural world.
- Listen to children describing and commenting on things they have seen whilst outside, including plants and animals.
- Encourage positive interaction with the outside world, offering children a chance to take supported risks, appropriate to themselves and the environment within which they are in.

Development Matters**Three- and Four-Year Olds**

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 range of vocabulary

Plant seeds and care for growing plants

Understand 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 living things

Explore and talk about different forces they feel

Talk about the differences between materials and changes they notice

Explore how things work

Reception

Explore the natural world around them.

Describe what they see, hear and feel whilst outside.

Recognise some environments that are different from the one in which they live.

Understand the effect of changing seasons on the natural world around them.

Vocabulary

Science, experiment, investigation, test, why, senses, world, plants (leaf, stem, root, flower, seeds), animals, humans, materials, see through, push/pull (linked to magnets), natural, change, grow, decay, rot, environment

ELG: The Natural World (Statutory)

Children at the expected level of development will:

- 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.

Autumn 1 2021		Autumn 2 2021	
Dinosaurs - comparing and grouping		Autumn/Winter/Celebrations – natural process’	
<ul style="list-style-type: none">I can identify dinosaurs which are meat eaters and plant eaters and know the vocabulary carnivore and herbivore<ul style="list-style-type: none">I can talk about similarities and differences between dinosaursI can name different body parts of dinosaursI can talk about changes I see in the Autumn		<ul style="list-style-type: none">I can talk about changes I see in the winterI can comment on and observe natural processes such as ice melting	
Spring 1 2022		Spring 2 2022	
Growing – our bodies, growth and change		Growing – plants, animals, farm visit	
<ul style="list-style-type: none">I can name different body partsI know how to keep a healthy bodyI can talk about how I have changed since being a babyI know how our body grows and changes over time		<ul style="list-style-type: none">I know <i>I need</i> to care for the natural environment and living thingsI know <i>how</i> to care for the natural environment and living thingsI know some features of our school environment and how they might varyI know the names of some baby animals born in springI can name parts of a plantI understand the key features of the lifecycle of a plantI know similarities and differences in relation to plantsI can talk about changes I see in Spring	
Summer 1 and 2 2022			
People who help us			
<ul style="list-style-type: none">I can make a shadow in the sunlightI can observe a magnet attracting and objectI can talk about changes I see in Summer			

Autumn 1 2022		Autumn 2 2022	
Everyday life – growing, changing, senses		Light and Dark – light, planets	
<ul style="list-style-type: none"> • I can talk about the life cycle of a human • I can talk about similarities, differences, patterns and change in relation to people • I can name body parts • I can talk about our senses • I can talk about the changes I see in Autumn 		<ul style="list-style-type: none"> • I can experiment with light travelling through transparent material • I can explore with torches to make shadows and colours • I can name some planets in the solar system • I can talk about famous scientists who are linked to space • I can talk about the changes I see in Winter 	
Spring 1 2023		Spring 2 2023	
Pirates – floating, sinking, sea life		Ticket to Ride – forces, experiments	
<ul style="list-style-type: none"> • I can sort objects into those that float and those that do not • I can create my own floating object • I can talk about similarities and differences in relation to sea creatures • I can talk about contrasting environments (the Seaside and Bunwell) 		<ul style="list-style-type: none"> • I can talk about the changes I see in Spring • I can make a balloon powered car • I can explore why things fly (helium balloons, paper aeroplanes, hot air balloons) • To explore forces (pull, push etc) 	
Summer 1 2023		Summer 2 2023	
Nature Detectives – caterpillars to butterflies, tadpoles to frogs, contrasting environments, trip to go pond dipping etc		Once upon a time – seasonal changes	
<ul style="list-style-type: none"> • I can talk about lifecycles • I can comment on and draw pictures of the natural world • I know different habitats and can comment on these • I show care and concern for living things and the environment 		<ul style="list-style-type: none"> • I know how to care for growing plants • I understand the key features of the lifecycle of a plant • I can talk about the changes I see in the Summer • I can talk about the changes through the year in all four seasons 	