



EYFS Science Overview 2021 - 2022



Each Science topic will begin with a whole class baseline assessment demonstrating the children's knowledge at the start of each unit of work. A further assessment will be carried out at the end of the topic to check that the children know and understand all **key facts** taught.

The knowledge and skills learnt will be revisited and expanded upon through the sequence of the EYFS Curriculum. Continuous provision and working walls will support pupils to remember key facts.

Educational Programme: Understanding the World

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.

Early Learning Goal: Understanding the World - The Natural World

Explore the natural world around them, making observations and drawing pictures of animals and plants.

Knows 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.

Cycle B	Key Question	By the end of Reception children will be able to...	Key Skills to be able to demonstrate	Experiences	Vocabulary	Global Goals
Autumn	What do I know about common everyday materials?	<p>Explore and identify a range of materials with similar and different properties. These will include metal, plastic, wood, glass and fabric.</p> <p>Name an object and the material from which it is made.</p> <p>Explain how certain materials are better for certain tasks.</p> <p>Investigate to demonstrate and explain which materials are waterproof.</p>	<p>Explore a range of different materials</p> <p>Observe objects and materials and describe what they see.</p> <p>Sort and group objects and materials.</p>	<p>Investigation to test materials to see if they are waterproof.</p> <p>Explore materials by handling them and using them.</p> <p>Use a range of objects as part of our school day and talk about the object and the material it is made from.</p>	<p>Materials, wood, plastic, metal, glass, stone, fabric, rock, waterproof, identify, object, made from, difference, hard, soft, rough, bendy, stiff, shiny, bumpy, dull, rough, smooth, fluffy, wrinkly, absorbent, stretchy, flexible, rigid</p>	<p>Which materials are causing pollution on our beaches? How can we keep our beaches clean?</p> <p>Pupils will know about the pollution on our beaches and in our seas and the effect on sea creatures.</p>
Spring	Which animals can I identify and describe?	<p>Identify and describe three common pets.</p> <p>Identify and describe three uk mammals.</p>	<p>Demonstrate identification of animals and parts of their body.</p>	<p>Harry the baby tortoise coming for regular visits - look at growth/weight/Changes</p>	<p>Rabbit, hedgehog, tortoise, dog, cat, goldfish, hamster, guinea pig, snake, mammals, shrew, insects, squirrel,</p>	<p>How can we take care of living things?</p> <p>Pupils will learn how to take</p>

		Explain in detail how to care for a pet.	Use of scientific language to ask and answer scientific questions about animals.	Gruff the Goat stories and visit Zoo lab visit Class stick insects Butterfly hatching	rodent, goat, different, similar, fur, hair, vertebrates, backbone, warm blooded, temperature, feed, milk, live young, give birth, bird, feathers, wings, reptile, similar, different, carnivores, herbivores, omnivores	care of a pet and how to treat animals with respect and care.
Summer	Which trees can I identify?	Explain that plants are living things that grow. Explain that plants need water, air and sunlight. Identify the parts of a plant - root, stem, flower, leaf. Identify a range of trees.	Handle equipment and tools effectively. Make observations of animals and plants and explain why some things occur, and talk about changes	Plant beans and spend a few weeks caring for them. Outdoor expeditions around school to identify and describe trees.	Plant, grow, living, water, air, sunlight, seeds, sunflower, poppy, broad bean, pepper, tres, garden, colourful, wild, leaves, petals, roots, flower, stem, soil, flower	How can we help to protect our trees and rainforests? Learn about the collection of palm oil and how it affects the orang-utans.

Seasonal Change

Autumn	What happens when Autumn turns to Winter?	<p>Demonstrate what we would need to do to keep warm in the Winter.</p> <p>Talk about how the weather affects birds living in the wild, in particular robins.</p>	<p>Use simple scientific words to ask or answer a scientific question.</p> <p>Identifying similarities and differences between the seasons.</p>	<p>Spend time outdoors in our school environment during the different seasons.</p> <p>Take temperature readings and record them daily to compare across the seasons.</p> <p>Participate in season related activities such as building a snowman, making a daisy chain etc</p>	<p>Spring, Summer, Autumn, Winter, seasons, weather, sunny, cloudy, cold, warm, hot, windy, rainy, dull, bright, sunshine, frost, snow, frozen, freeze, hedgehogs, robins, animals, clothes, hat, scarf, gloves, shorts, sandals, wild, environment, affected, January, February, March, April, May, June, July, August, September, October, adapt, November, December, human, hibernate</p>
Spring	How are humans affected by the seasons?	<p>Explain what clothing we would wear in the Spring and why.</p>			
Summer	How are our lives affected by the day being longer?	<p>Compare light/dark evenings and express a preference and a reason for that.</p>			

Continuous Provision	Links to Y1 Science
<p>What do I know about Materials? Inside: Collection of materials to touch and explore. Vocabulary to describe a range of materials/Books Writing materials to draw and write about the different materials Outside: Collecting pots to find examples of everyday materials Writing and drawing opportunities to record findings</p> <p>Which animals can you identify and describe? Inside: Story books/puppets/story stones related to different animals Photographs of visiting animals/Look after our stick insects Role play vets Outside: Building habitats for wild animals</p> <p>Which trees can I identify? Inside: Books provided in reading area Plants to look after/Nature area Outside: Planting opportunities/recording opportunities</p> <p>How do the Seasons Change? Inside: Up to date nature area showing the changing seasons Role play/ cutting and sticking/artwork Outside: Collecting opportunities in all weathers Artwork related to the seasons</p>	<ul style="list-style-type: none"> ● Beginning to correctly identify and name objects and the material from which it is made. ● To know the difference between an object and the material it is made from. ● Developing scientific language by being exposed to a wide range of topic related vocabulary. ● Beginning to learn simple properties of a range of materials. ● Begin to learn that not every material is suitable for every task/object. ● Begin to group together and compare a variety of everyday materials on the basis of their simple physical properties.