



Science

2022-2023

Aged 3 - 4
<p>Use all their senses in hands-on exploration of natural materials.</p> <p>Explore collections of materials with similar and/or different properties.</p> <p>Talk about what they see, using a wide vocabulary.</p> <p>Plant seeds and care for growing plants.</p> <p>Understand the key features of the life cycle of a plant and an animal.</p> <p>Begin to understand the need to respect and care for the natural environment and all living things.</p> <p>Explore and talk about different forces they can feel.</p> <p>Talk about the differences between materials and changes they notice.</p>
Children In Reception
<p>Explore the natural world around them.</p> <p>Describe what they see, hear and feel whilst outside.</p> <p>Understand the effect of changing seasons on the natural world around them.</p>
Early Learning Goal
<p>Explore the natural world around them, making observations and drawing pictures of animals and plants.</p> <p>Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p>
Year 1
<p>Working scientifically</p> <p>Ask simple questions and recognise that they can be answered in different ways.</p> <p>Observe closely, using simple equipment.</p> <p>Perform simple tests.</p> <p>Identify and classify.</p> <p>Use their observations and ideas to suggest answers to questions.</p> <p>Gather and record data to help answer questions.</p> <p><u>Biology</u></p> <p><i>Plants</i></p> <p>Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</p> <p>Identify and describe the basic structure of a variety of common flowering plants, including trees.</p> <p><i>Animals, including humans</i></p> <p>Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</p> <p>Identify a variety of common animals that are carnivores, herbivores and omnivores.</p> <p>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).</p> <p>Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</p> <p><u>Chemistry</u></p> <p><i>Everyday materials</i></p> <p>Distinguish between an object and the material from which it is made.</p> <p>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock.</p> <p>Describe the simple physical properties of a variety of everyday materials.</p> <p>Compare and group together a variety of everyday materials on the basis of their simple physical properties.</p>

Physics

Seasonal changes

Observe changes across the four seasons.

Observe and describe weather associated with the seasons and how day length varies.

Year 2

Working scientifically

Ask simple questions and recognise that they can be answered in different ways.

Observe closely, using simple equipment.

Perform simple tests.

Identify and classify.

Use their observations and ideas to suggest answers to questions.

Gather and record data to help answer questions.

Biology

Living things and their habitats

Explore and compare the differences between things that are living, dead, and things that have never been alive.

Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.

Identify and name a variety of plants and animals in their habitats, including micro-habitats.

Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.

Plants

Observe and describe how seeds and bulbs grow into mature plants.

Find out and describe how plants need water, light & suitable temperature to grow and stay healthy.

Animals, including humans

Notice that animals, including humans, have offspring which grow into adults.

Find out about and describe the basic needs of animals, including humans, for survival (water, food and air).

Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

Chemistry

Uses of everyday materials

Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.

Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.