Science Curriculum

Overview

Science

EYFS
The children will have been given opportunities to achieve the following ELGs

Communication and Language- Listening, Attention and Understanding:

- Make comments about what they have heard and ask questions to clarify their understanding.

Personal, Social and Emotional Development- Managing Self

- Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices.

Understanding the World - The Natural 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.

Year	Autumn	Spring	Summer
1	Recognise and identify common materials found around the home such as wood, plastic glass metal, water and rock. Distinguish between the object and the material it is made from Observe changes across the seasons	Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals Observe the weather and changes across the seasons Find out about the human body and the senses	Identify and name a variety of common plants and trees in our school environment and local area Find out about the human body and the senses Compare and study different animals including pets Continue studying the weather and seasonal changes
2	Identify and compare the suitability of a variety of everyday materials for particular uses. Find out how the shapes of objects made from some materials can be changed.	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,	Animals including humans Animals, including humans, have offspring which grow into adults. The basic needs of animals, including humans, for survival. The importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

		using the idea of a simple food chain and identify and name different sources of food.	
3	Use practical scientific methods, processes and skills to: Recognise that they need light in order to see things and that dark is the absence of light Notice that light is reflected from surfaces Recognise that light from the sun can be dangerous and that there are ways to protect their eyes Recognise that shadows are formed when the light from a light source is blocked by a solid object Find patterns in the way that the size of shadows change	Use practical scientific methods, processes and skills to: Compare and group materials. Observe what happens to materials as they change including the water cycle. To understand movement, forces and magnets. Compare how things move on different surfaces Notice that some forces need contact between two objects, but magnetic forces can act at a distance observe how magnets attract or repel each other and attract some materials and not others Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials Describe magnets as having two poles Predict whether two magnets will attract or repel each other, depending on which poles are facing.	Use practical methods, processes and skills to: Investigate flowering plants, learning the names and functions of each part and what they need to survive. Recognise Plant life cycles Recognise that living things can be grouped in a variety of ways Use classification keys to identify and name living things Recognise how environments can change Living things and their habitats
4	Use practical scientific methods, processes and skills to: Construct simple electrical circuits, including cells, wires, bulbs, switches, buzzers and lamps, Recognise common conductors and insulators Identify appliances that run on electricity Identify how sounds are made, associating some of them with something vibrating	Use practical scientific methods, processes and skills to: Compare and group rocks on the basis of their appearance and properties. Describe how fossils are formed. Recognise what soils are made from.	Use practical scientific methods, processes and skills to: Describe the simple functions of the basic parts of the digestive system in humans Identify the different types of teeth in humans and their simple functions Construct and interpret a variety of food chains, identifying producers, predators and prey.

	Recognise that vibrations from sounds travel through a medium to the ear Find patterns between the pitch of a sound and features of the object that produced it Find patterns between the volume of a sound and the strength of the vibrations that produced it Recognise that sounds get fainter as the distance from the sound source increases.		

Biology Chemistry Physics