



OUR SCIENCE YEAR B LEARNING JOURNEY

Nursery

Understanding the World

Use descriptive terms, such as 'fast', 'slow', 'hot' and 'cold' Explore how things work. Recognise, name and notice they have similarities and differences that connect them and distinguish them from others e.g. colour of eyes, hair skin. Know where they live.

Reception

Understanding of the World

To know about their own life story and how they have changed. To know about features of the immediate environment. To know some similarities and differences between things in the past and now. To know some important processes and changes in the natural world including states of matter.

- I look closely at similarities and differences
- I can talk how things work
- I can name some planets in the solar system
- I can talk about a life cycle
- I can name some minibeasts and comment on their features
- I can talk about things I have observed, such as plants, growth and change
- I can identify animals that live on a farm and their features

EYFS

Into The Wild.

Habitats

Explore and compare the differences between living, dead and thing that have never been alive. What do habitats need ? Match different habitats to different animals

Identify and name a variety of plants and animals in their habitats- polar, ocean, woodland, rainforest and pond. Compare the features of habitats. Walk to Chellow Dene- creature hunt- record their findings .

Look at the difference between seeds a Plant some cress heads and some broa they can observe the growth and comp How will we keep the plants healthy ?

Key Stage 1

Find out the basic needs of animals and humans to survive. Investigate the importance of exercise, healthy diet and hygiene. How can you become a healthy fire-fighter ?

Plants.

Walk to Chellow Dene- observe how the trees have changed for winter. Record the findings

Design a habitat for a new creature- it needs to meet all the needs of the creature.

Explore, Rescue, Protect.

Animals including humans.

Understand animals have offspring that grow into humans- how do they change ?

Pre-historic predators

Animals

Sort animals into groups- carnivore, herbivore and omnivore. Use these categories to group dinosaurs.

Food chains- describe how animals obtain their food – investigate and name different sources of food.

Wilderness Explorers.

Living Things

The criteria for a living thing. Identify different living things and sort into groups- vary the criteria. Investigate the removal of one of the essential needs for Living things

Walk to Chellow Dene- identify living things . Identify and describe the habitats of the living things. Children choose a criteria to sort the living things. Food chains- Who eats worms in the park- identify predators and prey.

How is chocolate made ? Identify the changes in matter through the process. Investigate the melting point of chocolate. How does temperature affect the state of chocolate, butter, ice?

Sound

Investigate the journey a whistle makes . How do we hear ? Make paper cup telephones – how does the volume affect it ?

Great British Innovators

Solids,liquids.gases- the story of cadburys. Identify the features of a solid, liquid and gas- sort according to the state of matter. Investigate different materials to see if the state of matter can be changed.

Lower Key Stage 2

Electricity

The story of the discovery of electricity and the light bulb. Build a circuit to light up a bulb. Test and sort insulators and conductors

Forces

Compare how things move on different surfaces. What causes friction ? How does friction affect movement ? Push and Pull- how will friction affect this ? Magnets- sort magnetic and non magnetic Label the poles on a magnet- predict if they will attract or repel

Incredible Journey Term 3

Digestive system

Why do we poo ? Describe the digestive system-investigate how food travels through the system and how it breaks down. Investigate the affect of water on the digestive system.

Forces

Investigate the affects of gravity when going into space.- Create a catapult that will fire your paper rocket. Investigate the affects of air , water and wind resistance.

Upper Key Stage 2

To Infinity and Beyond.

Earth in space.

Describe the position and movement of the earth in our solar system. Investigate the movement of the moon and the phases of the moon. Investigate night and day- looking at the movement of the sun across the sky.

Wonders of the world Materials

Compare materials according to solubility, transparency, conductivity and response to magnets. Sepaerate mixtures through filtering and evaporating. Investigate reversible and irreversible changes.

First, Furthest, Fastest.

Humans

Whatdo you need to train to be an elite athlete- case study of Mo Farrah and Ussain Bolt. How does diet, exercise, drugs affect your performance ?