



Our Science Learning Journey



Science Intent

At Sandy Lane, we believe that children should be provided with a high-quality Science education that gives children the foundations they need to recognise the importance of Science in every aspect of daily life. Our curriculum will encourage children to have a curiosity about the world around them through developing their research, investigation and evaluation skills. It will encourage respect for living organisms and the physical environment. Through high quality teaching and learning experiences, children will develop their ability to predict what will happen and analyse the causes. It will provide opportunities to evaluate evidence and explain the outcome. Children will be immersed in scientific vocabulary.

Vocabulary

Vocabulary

First, Furthest, Fastest.

Humans. What do 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 ?

UKS2

Wonders of the world

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

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.

UKS2

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.

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

Incredible Journey.

Water Cycle. Identify the effect of evaporation and condensation. Investigate how temperature affects evaporation. Follow the journey of a water droplet through the cycle.

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.

LKS2

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.

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.

Sound

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

LKS2

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?

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.

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 ?

Look at the difference between seeds and bulbs. Plant some cress heads and some broad beans so they can observe the growth and compare them. How will we keep the plants healthy ?

KS1

Plants.

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

Explore, Rescue, Protect.

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

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

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

KS1

EYFS

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.

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 .

Year B