Science Learning Journey

EYFS

Nursery

You will learn the names of a few simple animals.

You will learn about some of your body parts and what their purpose is.

You will learn about what a plant is and start to find them on the school site.

You will learn about how the weather can change through exploring the outdoor environment and sharing stories.

Reception

You will explore and find out about common animals. You will also learn about different body parts and how they are used for different things.

You will learn the names of some plants and discover why you need to care for them. You will learn about some of the plants that we eat and the fruits and vegetables that they produce.

You will begin to learn about materials and use them in your learning. You will spend time outdoors learning about the seasons, discovering what the weather is like in all of them.

Science Learning Journey

Key Stage 1

Humans

You will begin to investigate the human body. You will discuss what its main parts are called and find out which parts are related to your five senses.

Plants

Throughout the year, you will investigate a variety of different plants and identify if they are evergreen (keep their leaves all year) or deciduous (loose their leaves in some seasons). You will learn what all the parts of a plant and tree are called.

Year 1

Seasonal changes

Throughout the year, you will observe and learn about the changes between seasons and how they affect weather, plant life and how you live. You will spend time outside exploring and recording the changes and observing the range of weather you see.

Animals

You will find out about common animals, including: fish, amphibians, reptiles, birds and mammals. You'll find out about carnivores, herbivores and omnivores. You will begin to explore how various animals are structured differently.

Everyday materials

You will learn about the difference between an object and a material. You will explore and handle different materials and learn to name them. Through exploration, you will find out about the properties of different materials. e.g. bendy or hard.

Science Learning Journey

Key Stage 1

Plants

You will learn how seeds and bulbs grow into plants. You will experiment with plants to find out what they need to start growing.

Uses of everyday Materials

You will learn about how we use different ma different purposes, thinking about why the right material to use. You will explore more pr materials, thinking about if they can be squashe bent, squeezed or stretched.

Year 2

Animals, including humans

You will find out about animals' offspring and what animals need to stay alive and healthy. You will learn about why eating the right food, doing exercise and staying clean is important for humans.

Living things and their habitats

You will begin to discover what is dead, alive and has never been alive. You will explore what animals need to live and why they live where they do. You will find out about animals and plants that live in local habitats. You will also begin to create your own food chains.

Science Learning Journey

Lower Key Stage 2

Forces and magnets

You will find out about why things move differently on different surfaces. You will discover what magnets can do and explore which materials are magnetic. You will find out about magnets' poles and what happens when you put magnets together.

Rocks

You will explore different types of rock and discover their properties, grouping ones that are similar. You will find out about how fossils are formed when living things are trapped in rock. You will learn that soil is made up from rocks and organic matter.

Year 3

Animals, including humans

You will find out about what animals, including humans, need to grow healthily. You will learn about the role of skeletons and muscles in different animals.

Light

You will learn about the importance of light and how it can reflect from different surfaces. You will learn how to keep your eyes safe from the sun. You will investigate how shadows are formed and why their size changes.

Plants

You will learn what the function of the different parts of plants are. You will investigate what plants need to grow and stay healthy. You will learn how water is moved around the plant and find out how flowers play an important part in a plant's life cycle.

Science Learning Journey

Lower Key Stage 2

Electricity

You will explore which appliances in your home run on electricity. You will learn how to make simple circuits using wires, bulbs, buzzers, cells and switches. You will find out about some insulators and conductors of electricity.

States of matter

You will learn to identify solids, liquids and gases. You will discover, through exploration, how states of matter can be changed through cooling and heating. You will use this knowledge in your geography lessons to understand the water cycle.

Year 4

Sound

You will learn about how sounds are made and discover how sounds travel to the ear. You will explore pitch and volume, discovering what happens to the volume as you move away from the sound.

Animals, including humans

You will learn about the digestive system and the role of some of its parts. You will find out about the different type of teeth humans have. You will create and use food chains to identify producers, prey and predators.

Living things and their habitats

You will learn to group more complex plants and animals. You will use classification keys to identify animals locally and in our wider environment. You will consider how changes to the environment pose dangers to the animals and plants that live there.

Science Learning Journey

Upper Key Stage 2

Materials and their properties

You will learn how to group materials together using more complex properties, such as transparency. You will learn about dissolving and making solutions. You will explore how to separate mixtures and discover changes that can and cannot be reversed.

Forces

You will learn about gravity and its importance to the solar system and life on Earth. You will explore a range of contact forces. You will learn how levers, gears and pulleys can make the amount of force needed to complete a task, less.

Year 5

Earth and space

You will learn about planet earth and the other planets within our solar system. You will discover how the earth and moon move in relation to one and other, as well as the sun. You will discover why the sun 'appears' to move across the sky.

Living things and their habitats

You will learn about the life cycles of a mammal, an amphibian, an insect and a bird, and how they are different. You will explore the life process of reproduction in some plants and animals.

Animals, including humans

You will learn about the different stages a human goes through from birth to old age. You will explore some of the changes that occur to the human body during each of these stages.

Science Learning Journey

Upper Key Stage 2

Animals, including humans

You will explore and learn about the circulatory system, finding out how it works and the role of different parts of it. You will learn about the impact of diet, drugs and exercise on the way your body works.

Light

You will investigate how light travels. You will learn how the eye is able to see the world because of light. You will find out how light can be manipulated to travel around objects using different surfaces.

Year 6

Living things and their habitats

You will learn about how plants, animals and micro organisms can be grouped using formal classification methods. You will learn to provide reasons for classification based on specific characteristics.

Evolution and inheritance

You will learn about how living things have changed over time and how this can be related to early life through the use of fossils. You will explore why offspring will have traits from both parents. You will learn how plants and animals adapt to their environment and this may lead to evolution.

Electricity

You will investigate what happens to bulbs and buzzers when you change the number and voltage of a battery. Building from year 4 learning, you will learn to use recognised symbols to draw and represent circuits.