

Learning Journey Science

Living Things and Their Habitats

Pupils learn how living things are classified into broad groups. They explore similarities and differences between plants, animals and microorganisms. Pupils give reasons for classifying living things based on characteristics. They understand how classification supports scientific study.

Animals Including Humans

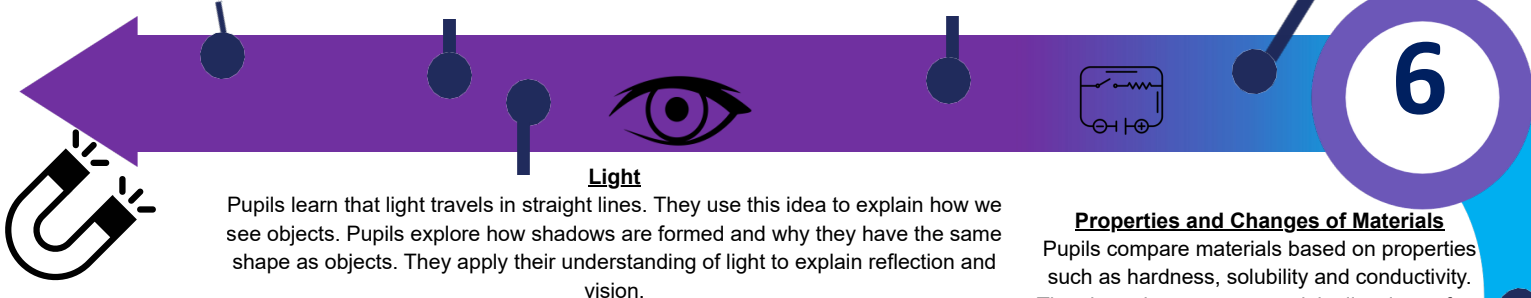
Pupils identify the main parts of the human circulatory system. They learn the functions of the heart, blood vessels and blood. Pupils explore how nutrients and water are transported around the body. They understand how diet, exercise and lifestyle affect health.

Electricity

Pupils investigate how the number and voltage of cells affect brightness and volume. They explore how components affect the performance of a circuit. Pupils use recognised symbols to represent circuits. They explain how changes in circuits affect outcomes.

Evolution and Inheritance

Pupils learn that living things have changed over time. They explore how fossils provide evidence of past life. Pupils learn that offspring inherit characteristics from their parents. They understand how adaptation can lead to evolution.



Light

Pupils learn that light travels in straight lines. They use this idea to explain how we see objects. Pupils explore how shadows are formed and why they have the same shape as objects. They apply their understanding of light to explain reflection and vision.

Properties and Changes of Materials

Pupils compare materials based on properties such as hardness, solubility and conductivity. They learn how some materials dissolve to form solutions. Pupils investigate reversible changes, including dissolving and melting. They learn that some changes are irreversible and form new materials.

Living Things and Their Habitats

Pupils learn about the life cycles of mammals, amphibians, insects and birds. They explore similarities and differences between life cycles. Pupils learn about reproduction in plants and animals. They develop an understanding of how living things grow and reproduce.

Forces

Pupils learn that gravity pulls objects towards the Earth. They investigate the effects of air resistance, water resistance and friction. Pupils explore how forces act between moving surfaces. They learn how mechanisms can change the effect of forces

Animals Including Humans

Pupils learn how humans change physically from birth to old age. They explore key stages of human development. Pupils understand how growth and ageing affect the body. They consider factors that influence healthy development

Sound

Pupils learn how sounds are made through vibrations. They explore how vibrations travel through different mediums to the ear. Pupils investigate how pitch and volume are related to vibrations. They learn that sounds become fainter as distance from the source increases.

Electricity

Pupils identify everyday appliances that use electricity. They construct simple series electrical circuits and name their components. Pupils investigate how switches control circuits. They learn about conductors and insulators and their uses.

States of Matter

Pupils learn to classify materials as solids, liquids or gases. They investigate how materials change state when heated or cooled. Pupils learn about evaporation and condensation in the water cycle. They explore how temperature affects changes of state.

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Earth and Space

Pupils learn about the movement of the Earth and other planets around the Sun. They explore the movement of the Moon around the Earth. Pupils learn that the Sun, Earth and Moon are approximately spherical. They use Earth's rotation to explain day and night.

Plants

Pupils learn to identify the functions of different parts of flowering plants, including roots, stems, leaves and flowers. They explore what plants need for life and growth, including air, light, water and nutrients from the soil. Pupils investigate how water is transported within plants. They learn how flowers are involved in pollination, seed formation and seed dispersal.

Forces and Magnets

Pupils compare how objects move on different surfaces. They learn that some forces require contact, while magnetic forces act at a distance. Pupils investigate how magnets attract and repel materials. They learn that magnets have poles and predict how magnets will interact.

Animals Including Humans

Pupils learn the basic functions of the human digestive system. They identify different types of human teeth and their functions. Pupils construct and interpret food chains. They learn how energy flows from producers to predators and prey.

Living Things and Their Habitats

Pupils learn that living things can be grouped in different ways. They use classification keys to identify and name living things in their local and wider environment. Pupils explore how environments can change over time. They learn that environmental changes can pose dangers to living things.

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Animals Including Humans

Pupils learn that animals, including humans, need the right types and amounts of nutrition. They explore how animals cannot make their own food and must obtain it from what they eat. Pupils identify that humans and some animals have skeletons for support and protection. They learn how muscles work with skeletons to allow movement.

Animals Including Humans

How animals, including humans, grow from babies to adults. What humans need to survive and stay healthy, including food, exercise and hygiene. Children compare how different animals grow and change. They learn why healthy choices are important for the human body.

Uses of Everyday Materials

Which materials are best for different jobs? How the shape of materials can be changed by bending, stretching and squashing. Children test materials to determine how they behave under applied forces. They learn that some changes can be undone while others cannot.

3

Rocks

Pupils compare and group different types of rocks based on their appearance and physical properties. They learn how fossils are formed when living things are trapped within rock. Pupils explore how soils are made from rocks and organic matter. They begin to understand how rocks and soils are used in everyday life.

Light

Pupils learn that light is needed to see and that darkness is the absence of light. They explore how light is reflected from surfaces. Pupils learn that light from the sun can be dangerous and how to protect their eyes. They investigate how shadows are formed and how their size changes.

Plants

How seeds and bulbs grow into mature plants. What plants need to grow well and stay healthy? Children observe plant growth over time. They begin to understand that plants need water, light and warmth to survive.

Living Things and Their Habitats

How living, dead and never-alive things are different. How animals and plants live in habitats and depend on each other in food chains. Children explore a range of habitats, including microhabitats. They learn that living things are suited to their environment.

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Everyday Materials

What different materials are called and what objects they are made from. How materials can be grouped by simple physical properties. Children explore materials by touching, bending and sorting them. They begin to use words such as hard, soft, smooth and rough to describe materials.

Plants

What plants are called and what parts they have, including roots, stems, leaves and flowers. How different plants grow and what they need to stay healthy. Children observe plants closely and describe similarities and differences between them. They begin to understand that plants are living things that change as they grow.

Plants

What plants can we see around us and what do they look like? What do plants need to grow and how can we help to care for them?

1

Seasonal Changes

How the weather changes across the four seasons. How day length changes throughout the year. Children observe seasonal changes in plants, animals and clothing. They begin to recognise patterns in weather across the year.

Animals Including Humans

What different animals are called and how they can be grouped. Which parts of the human body are linked to our senses. Children learn to name and describe common animals, including pets and wild animals. They explore how humans use their senses to understand the world around them.

Exploring the Natural World

What patterns and changes can we observe in the natural world? What questions can we ask about the world around us and how can we find answers?

Living Things and Their Environments

What is alive, dead or has never been alive, and how can we tell the difference? What plants and animals can we observe in our environment and how do they change over time?

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