

Living things and their habitats

Using our local environment, children will observe life-cycle changes in a variety of living things. They will learn about reproduction in plants and animals. Children will become skilful at classifying living things such as plants, invertebrates and vertebrates into relevant groups, eg: insects, fish, amphibians, mammals.

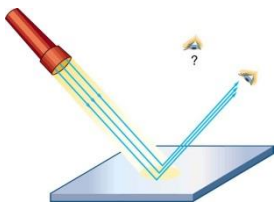
Forces

Working scientifically, children explore the effects of air resistance and friction on the movement of objects. They also explore the effects of levers, pulleys and simple machines on movement.



Properties and changes in materials

Children explore reversible changes, including evaporating, filtering, sieving, melting and dissolving and irreversible changes such as vinegar with bicarbonate of soda. Working scientifically, they may answer questions such as 'which materials would be the most effective for wrapping ice cream to stop it melting'?



Light

Children build on their knowledge and explore the way that light behaves, including light sources, reflection and shadows.

They work scientifically to explore the idea that light appears to travel in straight lines.

Science in Years 5 and 6

In upper key stage 2 pupils develop a deeper understanding of a wide range of scientific ideas. Children explore and talk about their ideas and are encouraged to ask their own questions about scientific phenomena. Children become more independent in selecting the most appropriate ways to answer science questions, including observing changes over different periods of time, noticing patterns, grouping and classifying things, carrying out comparative and fair tests and finding things out using a wide range of secondary sources of information. Working scientifically, children draw conclusions based on their data and observations, use evidence to justify their ideas, and use their scientific knowledge and understanding to explain their findings.

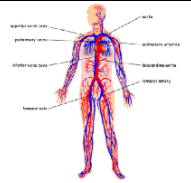


Earth and space

Children learn about how our solar system works which will enable them to explain day and night, to know about the planets and that the moon orbits the Earth.

Animals, including humans

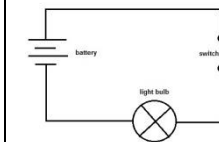
Children learn about the stages of growth and development of humans. They build on their knowledge of the main body parts and organs to include how the circulatory system enables to body to function. Children learn how to keep their bodies healthy by exploring research about the relationship between diet, exercise, drugs, lifestyle and health.



Evolution and inheritance

Building on their knowledge of fossils, children find out more about how living things on Earth have changed over time. They explore the idea that characteristics are passed from parents to their offspring and over time how animals and plants have adapted to survive within a particular environment.

Electricity



Children investigate using different components in series circuits and then represent these in a diagram using recognised symbols.