



KS2 SCIENCE LEARNING JOURNEY



Living things and their Habitats

Classification of living things
Identify vertebrates and invertebrates
Classify reptiles, amphibians, mammals and insects etc.

Evolution and Inheritance

Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago
Recognise that living things produce offspring of the same kind

Animals including Humans

Identify the main parts of the human circulatory system, and describe their functions
Recognise the impact of diet, exercise, drugs and lifestyle on the ways their bodies function
Describe the ways in which nutrients and water are transported within animals and humans

Transition to secondary

Electricity

Use recognised symbols when representing a simple circuit diagram
Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches

Light

Recognise that light appears to travel in straight lines, then use this idea to explain that objects are seen because they give out or reflect light into the eye
Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them



Earth and Space

Describe the movement of the Earth relative to the sun
Describe the movement of the Moon relative to the Earth
Describe the relationship between the Sun, Earth and Moon
Use the idea of the Earth's rotation to explain day and night, and the apparent movement of the sun across the sky

YEAR 6

Forces

Gravity

Identify the effects of air resistance, water resistance and friction, that act between moving surfaces
Recognise that some mechanisms including levers, pulleys and gears allow a small force to have a greater effect

Properties and Changes of Materials

Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution
Use knowledge of solids, liquids and gas to decide how mixtures might be separated, including through filtering, sieving and evaporating

Animals including Humans

Describe changes as humans develop from birth to old age



Living thing and their Habitats

Describe the differences in the lifecycle of a mammal, an amphibian, an insect and a bird
Describe the life process of reproduction in some plants and animals

Animals including Humans

Describe the simple functions of the basic parts of the digestive system
Identify different type of teeth in humans and their simple functions
Construct and interpret a variety of food chains, identifying producers, predators and prey

Living thing and their Habitats

Identify and name a variety of living things in the local and wider environment and group them
Recognise that environments can change and pose dangers

States of Matter

Compare and group materials into solids, liquids and gases
Observe how materials changes state when they are heated or cooled
Evaporation and condensation

YEAR 4



Forces and Magnets

Observe how magnets attract/repel some materials
Describe magnetic poles
Compare how things move on different surfaces: friction/forces

Rocks

Recognise that rocks are made of soil and organic matter
How fossils are formed
Types of rock



Electricity

Identify common appliances
Recognise some common conductors and insulators
Construct simple circuits including switches

Sound

Identify how sound are made, associating some of them with something vibrating
Find patterns between the pitch of and volume of a sound
Investigate travelling sound



Plants

Describe the functions of the different parts of plants
Explore the requirements of plants for life and growth
Investigate the way in which water is transported through a plant
Life cycle of a plant

Light

Identify sources of light, including the sun
Protecting eyes from the sun
Shadows
Notice that light is reflected from surfaces—reflection/mirrors



Animals Including Humans

Nutrition, linked to what we eat
Identify that humans and some other animals have skeletons and muscles for support, protection and movement

