

Year 4

Science

Age Related Expectations

Working Scientifically

Ask relevant questions and using different types of scientific enquiries to answer them.

Set up simple practical enquiries, comparative and fair tests.

Make organised and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.

Gather, record, classify and present data in a variety of ways to help in answering questions.

Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.

Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.

Use results to draw simple conclusions, make predictions for new values, suggest improvements and ask further questions.

Identify differences, similarities or changes related to simple scientific ideas and processes.

Use simple scientific evidence to answer questions or to support their findings.

Living things and their habitats

Recognise that living things can be grouped in a variety of ways.

Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.

Recognise that environments can change and that this can sometimes pose dangers to living things.

Animals including humans

Describe the simple functions of the basic parts of the digestive system in humans.

Identify the different types of teeth in humans and their simple functions.

Construct and interpret a variety of food chains, identifying producers, predators and prey.

States of Matter

Compare and group materials together, according to whether they are solids, liquids or gases.

Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius ($^{\circ}\text{C}$).

Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.

Sound

Identify how sounds are made, associating some of them with something vibrating.

Recognise that vibrations from sounds travel through a medium to the ear.

Find patterns between the pitch of a sound and features of the object that produced it.

Find patterns between the volume of a sound and the strength of the vibrations that produced it.

Recognise that sounds get fainter as the distance from the sound source increases.

Electricity

Identify common appliances that run on electricity.

Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.

Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery.

Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.

Recognise some common conductors and insulators, and associate metals with being good conductors.