

Band 4 – Science

Working Scientifically

Ask relevant questions and use different types of scientific enquiries to answer them (Year 4 focus).

I can ask relevant questions and use different types of scientific enquiries to answer them.

Set up simple practical enquiries, comparative and fair tests (Year 4 focus).

I can set up practical enquiries, comparative and fair tests.

Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers (Year 4 focus).

I can make systematic and careful observations, and take 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 with answering questions (Year 4 focus).

I can gather, record, classify and present data in a variety of ways to help with answering questions.

Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables (Year 4 focus).

I can 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 (Year 4 focus).

I can report on findings from enquiries, including spoken and written explanations, displays or presentations of results and conclusions.

Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions (Year 4 focus).

I can use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.

Identify differences, similarities or changes related to simple scientific ideas and processes (Year 4 focus).

I can identify differences, similarities or changes related to scientific ideas and processes.

Use straightforward scientific evidence to answer questions or to support his/her findings (Year 4 focus).

I can use scientific evidence to answer questions or to support my findings.

Animals Including Humans

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

I can explain some parts of the digestive system in humans.

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

I can explain the different types of teeth in humans and what they do.

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

I can describe and explain a variety of food chains, naming producers, predators and prey.

Electricity

Identify common appliances that run on electricity.

I can talk about 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.

I can construct and draw with labels a simple series electrical circuit which includes 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.

I can predict if a lamp will light or not 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.

I can explain 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.

I can show that some materials are conductors and some are insulators, and can explain that metals are good conductors.

Living Things & Their Habitats

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

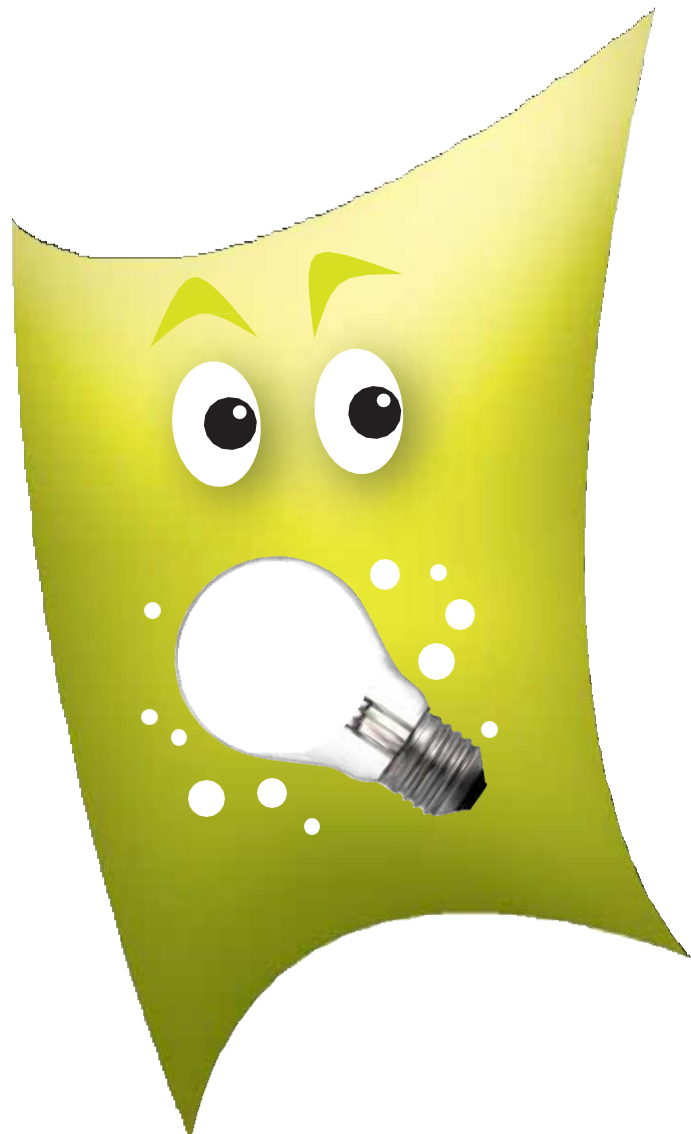
I can show that living things can be grouped together in various ways.

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

I can explore and use classification keys to help group, identify and name a variety of living things.

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

I can explain that environments can change and that this sometimes means that living things are put in danger.



Sound

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

I can explain how sounds are made and show that some of them are linked to vibrations.

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

I can explain 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.

I can 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.

I can show that there is a pattern 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.

I can show that sounds get fainter as the distance from the sound source increases.

States of Matter

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

I can group materials together, according to whether they are solids, liquids or gases, including tricky ones like gels, foams, mists and pastes.

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 (°C).

I can demonstrate and explain that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C).

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

I can correctly talk about the part played by evaporation and condensation in the water cycle, and can show a link between the rate of evaporation and temperature.