



Science Year 4.



Working scientifically:

- I can ask relevant questions and use different types of scientific enquiries to answer them.
- I can set up practical enquiries, comparative and fair tests.
- I can make systematic and careful observations, and take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.
- I can gather, record, classify and present data in a variety of ways to help with answering questions.
- I can record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.
- I can report on findings from enquiries, including spoken and written explanations, displays or presentations of results and conclusions.
- I can use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.
- I can identify differences, similarities or changes related to scientific ideas and processes.
- I can use scientific evidence to answer questions or to support my findings.

Electricity:

- I can talk about common appliances that run on electricity.
- I can construct and draw with labels a simple series electrical circuit which includes cells, wires, bulbs, switches and buzzers.
- 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.
- 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.
- I can show that some materials are conductors and some are insulators, and can explain that metals are good conductors.

Sound:

- I can explain how sounds are made and show that some of them are linked to vibrations.
- I can explain that vibrations from sounds travel through a medium to the ear.
- I can find patterns between the pitch of a sound and features of the object 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.
- I can show that sounds get fainter as the distance from the sound source increases.

Living Things and Their Habitats:

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

- I can explore and use classification keys to help group, identify and name a variety of living things.
- I can explain that environments can change and that this sometimes means that living things are put in danger.

Animals including humans:

- I can explain some parts of the digestive system in humans.
- I can explain the different types of teeth in humans and what they do.
- I can describe and explain a variety of food chains, naming producers, predators and prey.

State of Matter:

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