

What do you know?



Year 4

Science

Working Scientifically

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

I can set up simple practical investigations, compare things and make fair tests.

I can make organised and careful observations and take accurate measurements using the right units using a range of equipment, including thermometers and data loggers.

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

I can record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.

I can report findings from investigations, including explaining by talking and writing about them, displaying or presenting results and conclusions.

I can use results to draw simple conclusions, make predictions, suggest improvements and ask more questions.

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

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

States of Matter

I can compare and group materials together, according to whether they are solids, liquids or gases.

I can 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 ($^{\circ}\text{C}$).

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

Rock Cycle

I can compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.

I can describe in simple terms how fossils are formed when things that have lived are trapped within rock.

I can recognise that soils are made from rocks and organic matter.

I can explore and use classification keys to help group, identify and name.

Human Anatomy

I can identify that humans and some other animals have skeletons and muscles for support, protection and movement.

What do you know?



Year 4

Science

I can describe the simple functions of the basic parts of the digestive system in humans

I can identify the different types of teeth in humans and their simple functions

I can describe the changes as humans develop to old age.

Ecosystems

I can identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat

I can recognise that living things can be grouped in a variety of ways

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

I can construct and interpret a variety of food chains, identifying producers, predators and prey

Electrical Circuits

I can identify common appliances that run on electricity

I can construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers

I can 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 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 recognise some common conductors and insulators, and associate metals with being good conductors.

I can associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit

I can 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

I can use recognised symbols when representing a simple circuit in a diagram

Sound

I can identify how sounds are made, associating some of them with something vibrating

I can recognise 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 find patterns between the volume of a sound and the strength of the vibrations that produced it

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

What do you know?

Science



Year 4