

Working Scientifically

Living Things and their Habitats

... I can plan experiments to answer scientific questions.

... I know that for an experiment to be a fair test only one thing at a time can be changed.

... I can put plants and animals into smaller groups based on their characteristics.

... I can spot what things need to be controlled for an experiment to be a fair test.

I can use different types of equipment and take accurate and precise measurements.



... I can explain why an animal is classed as a vertebrate or an invertebrate.

... I can group vertebrates into fish, amphibians, reptiles, birds and mammals.

... I know that repeating measurements lets me see how reliable my results are.

... I can display the results of experiments in tables, bar charts, line graphs and scatter graphs.

... I can group invertebrates into insects, spiders, worms, snails and slugs.

... I can understand and use classification keys and labelled diagrams.

... I can write a conclusion that explains the results of an experiment.

The Year 6 Scientist
'I can...'

... I can explain why a plant is classed as a flowering or non-flowering plant.

... I can spot patterns in the results of an experiment.

... I can use my results to plan more experiments.

... I can group flowering plants into grasses, cereals, garden shrubs and deciduous trees.

... I can say whether the results of an experiment are reliable or not.

... I can write and talk about the things I've found out in my investigations, using simple scientific words.

... I know what evidence is and can say whether evidence supports a scientific idea or not.

... I can group non-flowering plants into algae, mosses, coniferous trees and ferns.

... I can make predictions using the results of an experiment.

Animals (including humans)

Evolution and Inheritance

Light

Electricity

... I know that the blood moves food (nutrients), water, oxygen and waste products around the body.

... I know that the blood vessels are arteries, veins and capillaries, and that they carry blood around the body.

... I know that the heart pumps blood around the body.

... I know why eating the right food and getting enough exercise is important for a healthy body.

... I know how water and nutrients move around our bodies.

... I know the effects that drugs and other lifestyle choices can have on our bodies.

... I can explain how living things are adapted to their habitat (where we live).

... I know that fossils show how living things on Earth have changed over millions of years.

I know that offspring (babies) look similar but not exactly the same as their parents.

... I can explain how variation and adaptation lead to evolution.

... I know that living things change over time and that this is called evolution.

... I know that the differences between offspring is called variation.

I know that offspring look similar but not exactly the same as each other.



The Year 6 Scientist
'I can...'

... I know that adding more batteries (cells) to a circuit will make a bulb (lamp) brighter or a buzzer louder.

... I know that using a battery with a higher voltage will make a bulb brighter or a buzzer louder.

... I can work out how changing a circuit will affect the brightness of a bulb or the volume of a buzzer.

... I can work out how opening and closing switches will affect the components in a circuit.

... I can draw simple circuit diagrams.

... I know that light travels in straight lines.

... I know that we can see light sources because light travels from them to our eyes.

... I know that because light travels in straight lines, objects can block it making shadows.

... I know that we can see objects because they reflect light from light sources into our eyes.

... I know that shadows are the same shape as the objects that make them because light travels in straight lines.