

Year 4 Program of Study Science

Sc4/1 Working Scientifically

During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

Sc4/1.1 asking relevant questions and using different types of scientific enquiries to answer them

Sc4/1.2 setting up simple practical enquiries, comparative and fair tests

Sc4/1.3 making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers

Sc4/1.4 gathering, recording, classifying and presenting data in a variety of ways to help in answering questions

Sc4/1.5 recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables

Sc4/1.6 reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions

Sc4/1.7 using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions

Sc4/1.8 identifying differences, similarities or changes related to simple scientific ideas and processes

Sc4/1.9 using straightforward scientific evidence to answer questions or to support their findings.

Sc4/2.1 All Living Things

Sc4/2.1a recognise that living things can be grouped in a variety of ways

Sc4/2.1b explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment

Sc4/2.1c recognise that environments can change and that this can sometimes pose dangers to living things.

Sc4/2.2 Animals including humans

Sc4/2.2a describe the simple functions of the basic parts of the digestive system in humans

Sc4/2.2b identify the different types of teeth in humans and their simple functions

Sc4/2.2c construct and interpret a variety of food chains, identifying producers, predators and prey.

Sc4/3.1 States of Matter

Sc4/3.1a compare and group materials together, according to whether they are solids, liquids or gases

Sc4/3.1b 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)

Sc4/3.1c identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.

Sc4/4.1 Sound

Sc4/4.1a identify how sounds are made, associating some of them with something vibrating

Sc4/4.1b recognise that vibrations from sounds travel through a medium to the ear

Sc4/4.1c find patterns between the pitch of a sound and features of the object that produced it

Sc4/4.1d find patterns between the volume of a sound and the strength of the vibrations that produced it.

Sc4/4.1e recognise that sounds get fainter as the distance from the sound source increases

Sc4/4.2 Electricity

Sc4/4.2a identify common appliances that run on electricity

Sc4/4.2b construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers

Sc4/4.2c 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

Sc4/4.2d recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit

Sc4/4.2e recognise some common conductors and insulators, and associate metals with being good conductors.