

Year 5 Program of Study Science

Sc5/1 Working Scientifically

During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

Sc5/1.1 planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary

Sc5/1.2 taking measurements, using a range of scientific equipment, with increasing accuracy and precision

Sc5/1.3 recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, and bar and line graphs

Sc5/1.4 using test results to make predictions to set up further comparative and fair tests

Sc5/1.5 reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations

Sc5/1.6 identifying scientific evidence that has been used to support or refute ideas or arguments.

Sc5/2.1 Living Things and their habitats

Sc5/2.1a describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird

Sc5/2.1b describe the life process of reproduction in some plants and animals.

Sc5/2.2 Animals, including humans

Sc5/2.2a describe the changes as humans develop to old age.

Sc5/3.1 Properties and Changes of Materials

Sc5/3.1a compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets

Sc5/3.1b know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution

Sc5/3.1c use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating

Sc5/3.1d give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic

Sc5/3.1e demonstrate that dissolving, mixing and changes of state are reversible changes

Sc5/3.1f explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.

Sc5/4.1 Earth and Space

Sc5/4.1a describe the movement of the Earth, and other planets, relative to the Sun in the solar system

Sc5/4.1b describe the movement of the Moon relative to the Earth

Sc5/4.1c describe the Sun, Earth and Moon as approximately spherical bodies

Sc5/4.1d use the idea of the Earth's rotation to explain day and night, and the apparent movement of the sun across the sky.

Sc5/4.2 Forces

Sc5/4.2a explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object

Sc5/4.2b identify the effects of air resistance, water resistance and friction, that act between moving surfaces

Sc5/4.2c recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect