

# Year 6 Program of Study Science

## **Sc6/1 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:

Sc6/1.1 planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary

Sc6/1.2 taking measurements, using a range of scientific equipment, with increasing accuracy and precision

Sc6/1.3 recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, and bar and line graphs

Sc6/1.4 using test results to make predictions to set up further comparative and fair tests

Sc6/1.5 using simple models to describe scientific ideas

Sc6/1.6 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

Sc6/1.7 identifying scientific evidence that has been used to support or refute ideas or arguments.

## **Sc6/2.1 Living Things and their habitats**

Sc6/2.1a describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals

Sc6/2.1b give reasons for classifying plants and animals based on specific characteristics.

## **Sc6/2.2 Animals including humans**

Sc6/2.2a identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood

Sc6/2.2b recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function

Sc6/2.2c describe the ways in which nutrients and water are transported within animals, including humans.

## **Sc6/2.3      Evolution**

Sc6/2.3a   recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago

Sc6/3.2b   recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents

Sc6/2.3c   identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

## **Sc6/4.1      Light**

Sc6/4.1a   recognise that light appears to travel in straight lines

Sc6/4.1b   use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye

Sc6/4.1c   explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes

Sc6/4.1d   use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them

## **Sc6/4.2      Electricity**

Sc6/4.2a   associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit

Sc6/4.2b   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

Sc6/4.2c   use recognised symbols when representing a simple circuit in a diagram.