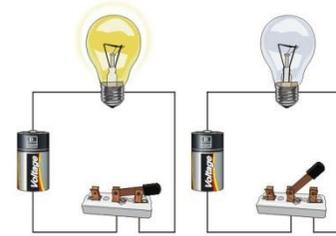


Science Progression of Skills

Year 6



Year 6 National Curriculum Objectives for Science: Children will be taught to:

Year 6 Working Scientifically:

Pupils should be taught to use the following practical scientific methods, processes and skills:

- In pairs or groups plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings and calculate a mean when appropriate.
- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables (including numbered readings and mean), scatter graphs, bar and line graphs.
- using test results to make predictions to set up further fair tests.
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations.
- identifying scientific evidence that has been used to support or refute ideas or arguments. E.g. Make a prediction and at the end of the investigation refer back to it and see if the evidence they have collated supports or refutes their original hypothesis.

Programmes of Study and topic links:

Identity: (Animals including Humans)

- identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.
- recognise the impact of diet, exercise, drugs and lifestyle on the way their body's function.
- describe the ways in which nutrients and water are transported within animals, including humans.

The Lost World: (Living Things and their Habitats & Evolution and Inheritance)

- recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.
- recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents
- identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.
- 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
- give reasons for classifying plants and animals based on specific characteristics

Disasters: (Forces)

- identify the effects of air resistance, water resistance and friction, that act between moving surfaces
- recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect

Electricity – Discrete:

- associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit
- 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
- use recognised symbols when representing a simple circuit in a diagram.

Notes

Children Working Below

Children who are working above objectives listed above