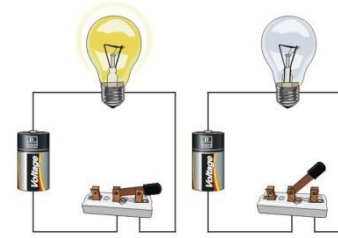


# Science Progression of Skills

## 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**