EES for schools

Band 6 - Science All

Steps

Working Scientifically

Plan different types of scientific enquiries to answer their own or others' questions, including recognising and controlling variables where necessary (Year 6 focus).

I can plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.

Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate (Year 6 focus).

I can take accurate measurements, using a range of scientific equipment, taking repeat readings when appropriate.

Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs (Year 6 focus).

I can record complex data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.

Use test results to make predictions to set up further comparative and fair tests (Year 6 focus).

I can use test results to make predictions to set up further comparative and fair tests.

Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations (Year 6 focus).

I can report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.

Identify scientific evidence that has been used to support or refute ideas or arguments (Year 6 focus).

I can identify scientific evidence that has been used to support or refute ideas or argument.

Describe and evaluate their own and other people's scientific ideas related to topics in the national curriculum (including ideas that have changed over time), using evidence from a range of sources.

I can describe and evaluate my own and other people's scientific ideas using evidence from a range of sources.

Group and classify things and recognise patterns.

I can group and classify things and recognise patterns.

Find things out using a wide range of secondary sources of information.

I can find things out using a wide range of secondary sources of information.

Use appropriate scientific language and ideas from the national curriculum to explain, evaluate and communicate his/her methods and findings.

I can use scientific language and ideas to explain, evaluate and communicate my methods and findings.

Electricity

Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.

I can show that the brightness of a lamp or the volume of a buzzer depends on 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.

I can 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.

I can draw a diagram using recognised symbols to represent a simple circuit.

Evolution & 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.

I can explain that the kinds of living things that live on the earth now are different from those that inhabited the Earth millions of years ago and that fossils provide this information.

Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.

I can explain 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.

I can give examples of how animals and plants are adapted to suit their environment in different ways and can explain that adaptation may lead to evolution.

Living Things & Their Habitats

Give reasons for classifying plants and animals based on specific characteristics.

I can give reasons for classifying plants and animals based on specific characteristics.

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.

I can describe how plants, animals and micro-organisms are classified into broad groups according to common observable characteristics and based on similarities and differences.

Materials

Demonstrate that dissolving, mixing and changes of state are reversible changes.

I can demonstrate that dissolving, mixing and changes of state are reversible changes.

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.

I can 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.