
Year 4

Units

NC Objectives covered

Electricity

- **(K)** Identify common appliances that run on electricity
- **(K)** Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers
- **(K)** Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery
- **(K)** Recognise some common conductors and insulators, and associate metals with being good conductors.
- **(K)** Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
- **(WS)** Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- **(WS)** Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- **(WS)** Using straightforward scientific evidence to answer questions or to support their findings.
- **(WS)** Asking relevant questions and using different types of scientific enquiries to answer them
- **(WS)** Identifying differences, similarities or changes related to simple scientific ideas and processes

Dangers to Living Things

- **(K)** Recognise that environments can change and that this can sometimes pose dangers to living things.
- **(K)** Construct and interpret a variety of food chains, identifying producers, predators and prey.
- **(WS)** Asking relevant questions and using different types of scientific enquiries to answer them
- **(WS)** Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- **(WS)** Setting up simple practical enquiries, comparative and fair tests
- **(WS)** Using straightforward scientific evidence to answer questions or to support their findings.

Human Nutrition

- **(K)** Describe the simple functions of the basic parts of the digestive system in humans
- **(K)** Identify the different types of teeth in humans and their simple functions
- **(WS)** Asking relevant questions and using different types of scientific enquiries to answer them
- **(WS)** Setting up simple practical enquiries, comparative and fair tests
- **(WS)** Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- **(WS)** Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions

Sound

- **(K)** Identify how sounds are made, associating some of them with something vibrating
- **(K)** Recognise that vibrations from sounds travel through a medium to the ear
- **(K)** Find patterns between the pitch of a sound and features of the object that produced it
- **(K)** Find patterns between the volume of a sound and the strength of the vibrations that produced it
- **(K)** Recognise that sounds get fainter as the distance from the sound source increases.
- **(WS)** Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- **(WS)** Setting up simple practical enquiries, comparative and fair tests
- **(WS)** Identifying differences, similarities or changes related to simple scientific ideas and processes

Grouping Living Things

- **(K)** Recognise that living things can be grouped in a variety of ways
- **(K)** Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment
- **(WS)** Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- **(WS)** Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers

Changes of
State

- **(WS)** Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- **(WS)** Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- **(WS)** Using straightforward scientific evidence to answer questions or to support their findings.
- **(K)** Compare and group materials together, according to whether they are solids, liquids or gases
- **(K)** Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius ($^{\circ}\text{C}$)
- **(K)** Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.
- **(WS)** Identifying differences, similarities or changes related to simple scientific ideas and processes
- **(WS)** Setting up simple practical enquiries, comparative and fair tests
- **(WS)** Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- **(WS)** Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions