



Science Objectives Year 4

Units	NC Objectives covered
Electricity	<ul style="list-style-type: none"> • 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 (K) • 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 (WS)
Dangers to Living Things	<ul style="list-style-type: none"> • 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. (K) • 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. (WS)
Human Nutrition	<ul style="list-style-type: none"> • 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 (K) • 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 (WS)
Sound	<ul style="list-style-type: none"> • 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)

	<ul style="list-style-type: none"> • Recognise that sounds get fainter as the distance from the sound source increases. (K) • 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 (WS)
Grouping Living Things	<ul style="list-style-type: none"> • 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 (K) • 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 (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. (WS)
Changes of State	<ul style="list-style-type: none"> • 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 (°C) (K) • Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. (K) • 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 (WS)