

Y4 Scientific Areas of Learning

Classifying Living Things	Teeth, Digestion and Food Chains	States of Matter
<ul style="list-style-type: none"> Recognise that living things can be grouped in a variety of ways Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment 	<ul style="list-style-type: none"> Describe the simple functions of the basic parts of the digestive system in humans Identify the different types of teeth in humans and their simple functions Construct and interpret a variety of food chains, identifying producers, predators and prey. 	<ul style="list-style-type: none"> Compare and group materials together, according to whether they are solids, liquids or gases 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) Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.
Sound	Electricity	Habitats
<ul style="list-style-type: none"> Identify how sounds are made, associating some of them with something vibrating Recognise that vibrations from sounds travel through a medium to the ear Find patterns between the pitch of a sound and features of the object that produced it Find patterns between the volume of a sound and the strength of the vibrations that produced it. Recognise that sounds get fainter as the distance from the sound source increases 	<ul style="list-style-type: none"> Identify common appliances that run on electricity Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers 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 Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit Recognise some common conductors and insulators, and associate metals with being good conductors 	<ul style="list-style-type: none"> Recognise that environments can change and that this can sometimes pose dangers to living things.

Working scientifically

Planning Investigations:

- Asking relevant questions
- Planning different types of scientific enquiries to answer questions
- Setting up simple and practical enquiries, comparative and fair tests

Conducting Experiments:

- Making systematic and careful observations, using a range of equipment, including thermometers and data loggers
- Taking accurate measurements using standard units, where appropriate

Recording Evidence:

- Recording findings using simple scientific language, drawings and labelled diagrams
- Recording findings using keys, bar charts and tables
- Gathering, recording, classifying and presenting data in a variety of ways to help to answer questions

Reporting Findings:

- Reporting on findings from enquiries, including oral and written explanations, of results and conclusions
- Reporting on findings from enquiries using displays or presentations

Conclusions and Predictions:

- Identifying differences, similarities or changes related to simple scientific ideas and processes
- Using straightforward scientific evidence to answer questions or to support findings
- Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions