

## Year 4 Science Topics

Year Group	Autumn	Spring	Summer
Year 4	<p><b>Animals including Humans</b></p> <ul style="list-style-type: none"> <li>• Functions and parts of the digestive system in humans</li> <li>• Different types of teeth and their functions</li> <li>• Food chains</li> </ul> <p><b>All Living Things</b></p> <ul style="list-style-type: none"> <li>• Group in a variety of ways</li> <li>• Classification keys</li> <li>• Dangers to living things</li> </ul>	<p><b>Changes of State</b></p> <ul style="list-style-type: none"> <li>• Solids, liquids and gases</li> <li>• Heating and cooling, evaporation and condensation</li> </ul>	<p><b>Sound</b></p> <ul style="list-style-type: none"> <li>• Vibration and Pitch</li> <li>• Volume and Distance</li> </ul> <p><b>Electricity</b></p> <ul style="list-style-type: none"> <li>• Simple circuits</li> <li>• Identify and name basic components</li> <li>• Switches</li> <li>• Conductors and insulators</li> </ul>

Year 4	Objectives
<b>Working Scientifically</b>	<p data-bbox="443 297 1233 394">During Year 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <ul data-bbox="480 432 1377 1290" style="list-style-type: none"> <li data-bbox="480 432 1222 495">• asking relevant questions and using different types of scientific enquiries to answer them</li> <li data-bbox="480 533 1347 566">• setting up simple practical enquiries, comparative and fair tests</li> <li data-bbox="480 604 1377 734">• making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</li> <li data-bbox="480 772 1265 835">• gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</li> <li data-bbox="480 873 1326 936">• recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</li> <li data-bbox="480 974 1334 1081">• reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</li> <li data-bbox="480 1120 1331 1182">• find patterns between the volume of a sound and the strength of the vibrations that produced it</li> <li data-bbox="480 1220 1278 1283">• recognise that sounds get fainter as the distance from the sound source increases</li> </ul>

**Electricity**

- 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