

SCIENCE CURRICULUM– YEAR 4

| THEME | KNOWLEGDE | SCIENTIFIC INVESTIGATION SKILLS |
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| All Living Things | <p>Describe the simple functions of the basic parts of the digestive system in humans</p> <p>Identify the different types of teeth in humans and their simple functions</p> <p>Construct and interpret a variety of food chains, identifying producers, predators and prey</p> | <p><u>Planning & Communication</u> Record observations, comparisons and measurements using tables and bar charts</p> <p>Begin to plot points to form a simple graph</p> <p>Use graphs to point out and interpret patterns in their data</p> <p>Select information from a range of sources provided for them</p> |
| States of Matter | <p>Compare and group materials together, according to whether they are solids, liquids or gases</p> <p>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)</p> <p>Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature</p> | <p><u>Investigation & Observing</u> With help, pupils begin to realise that scientific ideas are based on evidence</p> <p>Show in the way they perform their tasks how to vary one factor while keeping others the same</p> <p>Decide on an appropriate approach in their own investigations to answer questions</p> <p>Describe which factors they are varying and which will remain the same and say why</p> |
| Sound | <p>Identify how sounds are made, associating some of them with something vibrating</p> <p>Recognise that vibrations from sounds travel through a medium to the ear</p> <p>Find patterns between the pitch of a sound and features of the object that produced it</p> | <p><u>Observing & Recording</u> Carry out measurement accurately</p> <p>Make a series of observations, comparisons and measurements</p> <p>Select and use suitable equipment</p> <p>Make a series of observations and measurements adequate for the task</p> |

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| | <p>Find patterns between the volume of a sound and the strength of the vibrations that produced it</p> <p>Recognise that sounds get fainter as the distance from the sound source increases</p> | |
| Electricity | <p>Identify common appliances that run on electricity</p> <p>Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</p> <p>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</p> <p>Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit</p> <p>Recognise some common conductors and insulators, and associate metals with being good conductors</p> | <p><u>Considering Evidence and Evaluating</u></p> <p>Predict outcomes using previous experience and knowledge and compare with actual results</p> <p>Begin to relate their conclusions to scientific knowledge and understanding</p> <p>Suggest improvements in their work, giving reasons</p> |