

**Science Coverage for Years 2 and 3**

**2021 - 2022**

**Milestone 1 Statements**

| 1½ - 2 hour weekly sessions. | Term 1   | Term 2   | Term 3  | Continuous Provision<br>(Working Scientifically)   |
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| <b>Week 1</b>                | <b>Milestone 1 (Advancing) Plants</b><br><br>What are the similarities and differences between deciduous and evergreen trees?  | <b>Milestone 1 (Advancing) Plants</b><br><br>Think of some ways to categorise plants.  | <b>Milestone 1 (Advancing) Plants</b><br><br>*(Y2) What are the similarities and differences in the growth of seeds and bulbs?  | <b>Through experiment tables set up at throughout the year:</b> <ul style="list-style-type: none"> <li>• Experiment with pushing objects gently and hard. Record and explain what happens.</li> <li>• Experiment with a slope and record how this changes the speed at which an object rolls.</li> <li>• Compare the movement of remote control cars and a helicopter drone. Explain the differences in movement.</li> </ul> |
| <b>Week 2</b>                | <b>Milestone 1 (Advancing) Animals, including Humans</b><br><br>Point out explain the main differences between birds, fish, amphibians, reptiles, mammals, and invertebrates.            | <b>Milestone 1 (Advancing) Plants</b><br><br>*(Y3) Taking a selection of (real) different flowering plants, what are the structural features?                    | <b>Milestone 1 (Advancing) Plants</b><br><br>*(Y2) How could you try to revive these plants? <i>Give pupils a dried out plant, one that has been in the fridge, one that has been kept in the dark etc.</i> |  |
| <b>Week 3</b>                | <b>Milestone 1 (Advancing) Animals, including Humans</b><br><br>Show how carnivores, herbivores and omnivores are similar and different.   | <b>Milestone 1 (Advancing) Animals, including Humans</b><br><br>Compare and contrast mammals with amphibians.  | <b>Milestone 1 (Advancing) Animals, including Humans</b><br><br>Explain why the sense of touch may be important to a blind person.  |  |
| <b>Week 4</b>                | <b>Milestone 1 (Advancing) Animals, including Humans</b><br><br>Explain the main differences between adult animals and humans and their offspring.<br><br>*(Y2) Present similarities and | <b>Milestone 1 (Advancing) Animals, including Humans</b><br><br>*(Y2) Describe the basic needs of animals, including humans, for survival (water, food and air). | <b>Milestone 1 (Advancing) Animals, including Humans</b><br><br>*(Y2) Categorise food types and explain why each group is important to humans.  |  |

**Year 2 Working Scientifically National Curriculum Statements:**

- Ask simple questions and recognising that they can be answered

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|               | differences between parents and their children.  | *(Y2) Compare the types of food that different animals require.  | *(Y2) Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.   | <p>in different ways observing closely, using simple equipment.</p> <ul style="list-style-type: none"> <li>• Perform simple tests.</li> <li>• Identify and classify.</li> <li>• Use their observations and ideas to suggest answers to questions.</li> <li>• Gather and record data to help in answering questions.</li> </ul> <p><b>Year 3 Working Scientifically National Curriculum Statements</b></p> <ul style="list-style-type: none"> <li>• Ask relevant questions and using different types of scientific enquiries to answer them.</li> <li>• Set up simple practical enquiries, comparative and fair tests.</li> <li>• Make systematic and careful observations and, where appropriate, taking accurate</li> </ul> |
| <b>Week 5</b> | <p><b>Milestone 1 (Advancing) <i>Living Things</i></b></p> <p>*(Y2) Organise things of your choice into groups: living, dead and never been alive.</p> | <p><b>Milestone 1 (Advancing) <i>Living Things and Their Habitats</i></b></p> <p>*(Y2) Categorise animals/plants according to the conditions they require.</p>   | <p><b>Milestone 1 (Advancing) <i>Living Things and Their Habitats</i></b></p> <p>*(Y2) Explain why a habitat for a plant or animal is suitable.</p> <p>*(Y2) Explain the differences in a food chain for a herbivore and a carnivore.</p>   |  |
| <b>Week 6</b> | <p><b>Milestone 1 (Advancing) <i>Materials</i></b></p> <p>Explain how a glass bottle is made from sand.</p>  | <p><b>Milestone 1 (Advancing) <i>Materials</i></b></p> <p>Choose some objects and explain how they were made from their original material.</p> <p>Decide how to group the materials on the basis of their properties. Explain your reasons for your groups.</p> <p>Groups based on the materials they are made from. Explain your groupings.</p> | <p><b>Milestone 1 (Advancing) <i>Materials</i></b></p> <p>Explain why the properties of materials are useful for deciding which materials to use for an object. Give example.</p> <p>*(Y2) Compare and contrast the different properties of materials and use this to explain why certain materials are used for particular purposes.</p> <p>Experiment with changing the shape of solid objects. Organise and summarise your findings.</p> |  |
| <b>Week 7</b> | <p><b>Milestone 1 (Advancing) <i>Light and Seeing</i></b></p> <p>*(Y3) Experiment with ways to</p>   | <p><b>Milestone 1 (Advancing) <i>Space</i></b></p> <p>Show how you might know (apply) roughly what time it is</p>  | <p><b>Milestone 1 (Advancing) <i>Space</i></b></p> <p>Organise images or objects from each season into</p>  |  |

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|                | <p>block light from reaching our eyes.</p> <p>Point out how this demonstrates that light travels from a source to our eyes.</p>  | <p>in a day by looking at the position of the sun.</p>   | <p>categories.</p> <p>Explain your categories.</p>  | <p>measurements using standard units, using a range of equipment, including thermometers and data loggers.</p> <ul style="list-style-type: none"> <li>• Gather, record, classify and present data in a variety of ways to help in answering questions.</li> <li>• Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</li> <li>• Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</li> <li>• Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</li> </ul> |
| <b>Week 8</b>  | <p><b>Milestone 1 (Advancing) <i>Sound and Hearing</i></b></p> <p>Categorise sounds.</p> <p>Compare and contrast sounds based on your own criteria (choose).</p>   | <p><b>Milestone 1 (Basic/Advancing) <i>Seasons</i></b></p> <p>Compare and contrast weather and day length across the four seasons.</p> <p>Identify patterns in day length across the four seasons.</p> | <p><b>Consolidation Week</b><br/><i>Possible Ideas:</i></p> <p>Explain why habitats for rabbits differ from those of a frog (or chose other animals).</p> |  |
| <b>Week 9</b>  | <p><b>Milestone 1 (Advancing) <i>Electrical Circuits</i></b></p> <p>Categorise electrical appliances. Explain the reasons for your categories.</p> <p>Compare and contrast some appliances in each of your categories.</p> | <p><b>Milestone 1 (Deep) <i>Electrical Circuits</i></b></p> <p>Experiment with broken circuits.</p>  | <p><b>Consolidation Week</b><br/><i>Possible Ideas:</i></p> <p>List all of the animals you know and describe the differences between them.</p>            |  |
| <b>Week 10</b> | <p><b>Milestone 1 (Advancing) <i>Electrical Circuits</i></b></p> <p>Modify a circuit to add components.</p> <p>Experiment with and categorise the effect adding more components has.</p>                                   | <p><b>Consolidation Week</b><br/><i>Possible Ideas:</i></p> <p>List all of the common garden plants and wild plants you know.</p> <p>List all the common deciduous and evergreen trees you know.</p>   | <p><b>Milestone 1 (Basic) <i>Animals, including Humans</i></b></p> <p>Describe a healthy diet for a human.</p>  |  |

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|                                     |  |   |   | <ul style="list-style-type: none"> <li>• Identify differences, similarities or changes related to simple scientific ideas and processes.</li> <li>• Use straightforward scientific evidence to answer questions or to support their findings.</li> </ul> |
|                                     | <b>Autumn Term</b>   | <b>Spring Term</b>  | <b>Summer Term</b>  |  |
| <b>Possible Investigation Ideas</b> | <p><i>Possible Ideas:</i></p> <p>Experiment with creating shadows using different materials.</p> <p>Experiment with adding components to a simple circuit.</p> | <p><i>Possible Ideas:</i></p> <p>Track the movement of the sun by drawing around shadows throughout the day (Human Sundial).</p> <p>Experiment with fixing faulty circuits.</p> | <p><i>Possible Ideas:</i></p> <p>Grow seeds and bulbs in different conditions.</p> <p>Investigate the effect of exercise.</p> |  |