



Fen Ditton C. P. School

**Science Coverage for Years 2 and 3**

**2020 - 2021**

**Milestone 1 Statements**



1½ - 2 hour weekly sessions.	Term 1	Term 2	Term 3	Continuous Provision (Working Scientifically)
<b>Week 1</b>	<b>Milestone 1 (Advancing) Plants</b>  What are the similarities and differences between deciduous and evergreen trees?	<b>Milestone 1 (Advancing) Plants</b>  Think of some ways to categorise plants.	<b>Milestone 1 (Advancing) Plants</b>  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>  Point out explain the main differences between birds, fish, amphibians, reptiles, mammals, and invertebrates.	<b>Milestone 1 (Advancing) Plants</b>  Taking a selection of (real) different flowering plants, what are the structural features?	<b>Milestone 1 (Advancing) Plants</b>  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>  Show how carnivores, herbivores and omnivores are similar and different.	<b>Milestone 1 (Advancing) Animals, including Humans</b>  Compare and contrast mammals with amphibians.	<b>Milestone 1 (Advancing) Animals, including Humans</b>  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>  Explain the main differences between adult animals and humans and their offspring.  Present similarities and	<b>Milestone 1 (Advancing) Animals, including Humans</b>  Compare the types of food that different animals require.	<b>Milestone 1 (Advancing) Animals, including Humans</b>  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

	differences between parents and their children.			<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>
<b>Week 5</b>	<p><b>Milestone 1 (Advancing) <i>Living Things</i></b></p> <p>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>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>Explain why a habitat for a plant or animal is suitable.</p> <p>Explain the differences in a food chain for a herbivore and a carnivore.</p>	<p><b>Year 3 <i>Working Scientifically</i> 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 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>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>Experiment with ways to block light from reaching our eyes.</p>	<p><b>Milestone 1 (Advancing) <i>Space</i></b></p> <p>Show how you might know (apply) roughly what time it is in a day by looking at the position of the sun.</p>	<p><b>Milestone 1 (Advancing) <i>Space</i></b></p> <p>Organise images or objects from each season into categories.</p>	

	Point out how this demonstrates that light travels from a source to our eyes.		Explain your categories.	<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> <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> <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> <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>	

				<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>				

For terms which are longer than 10 weeks or where you have spare weeks, you may wish to spend longer on or revisit concepts the children are struggling to understand. Also think about building in 'quizzes' regularly which cover all the content you have taught so far to help embed it into their long term memory.

You may want a science area set up in your classroom with ongoing experiments set up.

Your science display area should act as a 'working wall' and build up over the term - hopefully this will help the children to begin to make connections.

Don't forget to sign up/sign in to:

<https://www.reachoutcpd.com/> and use this regularly to supplement your own scientific knowledge and to provide you with scientific enquiry ideas.