

**Science Long Term and Medium Term Planning Year 3/4 2017-2018**

	Subject	National Curriculum Objectives	I can Statements	Activities
Autumn 2	Living in Environments	<p><i>Year 4 PoS</i></p> <ul style="list-style-type: none"> <li>recognise that living things can be grouped in a variety of ways;</li> <li>explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.</li> <li>recognise that environments can change and that this can sometimes pose dangers to living things.</li> </ul> <p><i>Non-statutory guidance:</i></p> <ul style="list-style-type: none"> <li>Pupils should explore possible ways of grouping a wide selection of living things that include animals, flowering plants and non-flowering plants.</li> <li>Pupils could begin to put vertebrate animals into groups, for example: fish, amphibians, reptiles, birds, and mammals; and invertebrates into snails and slugs, worms, spiders, and insects.</li> <li>Pupils should explore examples of human impact (both positive and negative) on environments, for example, the positive effects of nature reserves, ecologically planned parks, or garden ponds, and the negative effects of population and development, litter or deforestation.</li> </ul>	<ul style="list-style-type: none"> <li>I can identify a variety of habitats and explore why organisms live in different habitats.</li> <li>I can group organisms according to their characteristics.</li> <li>I can classify animals into specific groups according to their characteristics.</li> <li>I can use a classification key to identify animals.</li> <li>I can identify and classify a variety of British plants.</li> <li>I can explore the human impact on habitats and environments.</li> </ul>	See 'Plan Bee' lesson plans.

<p>Spring 1</p>	<p>Electricity: Circuits and Conductors</p>	<p><i>Lower KS2 - Working Scientifically</i></p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• ask relevant questions and use different types of scientific enquiries to answer them.</li> <li>• set up simple practical enquiries.</li> <li>• record findings using simple scientific language, drawings and labelled diagrams.</li> <li>• reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</li> <li>• using results to draw simple conclusions</li> <li>• using straightforward scientific evidence to answer questions or to support their findings.</li> </ul> <p><i>Year 4 PoS</i></p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• identify common appliances that run on electricity;</li> <li>• construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers;</li> <li>• 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;</li> <li>• recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit (HA);</li> <li>• recognise some common conductors and insulators, and associate metals with being good conductors.</li> </ul> <p>Non-statutory guidance:</p> <ul style="list-style-type: none"> <li>• Pupils should construct simple series circuits</li> </ul>	<ul style="list-style-type: none"> <li>• I can investigate circuits and their different components.</li> <li>• I can investigate the differences between mains and battery-powered circuits.</li> <li>• I can recognise some common conductors and insulators, and associate metals with being good conductors</li> <li>• I can investigate the purposes of conducting and insulating materials.</li> <li>• To be able to use knowledge of conductors and insulators to create switches to complete a circuit.</li> <li>• I can plan and carry out an experiment to see how to change the brightness of a bulb.</li> </ul>	<p>See 'Plan Bee' lesson plans.</p>
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*Mrs. Mayer*