



**Subject: Science (Living things and their habitats)**

Year Group	What knowledge would we like to know?	What skills would we like to know?	How else could we challenge the pupils?	Vocabulary
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Y1	Not in the NC for this year group	<ul style="list-style-type: none"> <li>Ask simple questions and recognise that they can be answered in different ways</li> <li>Use simple equipment to observe closely</li> <li>Perform simple tests</li> <li>Identify and classify</li> <li>Use his/her observations and ideas to suggest answers to questions</li> <li>Gather and record data to help in answering questions</li> </ul>		fish amphibian reptile mammal bird feather warm-blooded characteristic backbone hatchling reptile gills scale cold-blooded herbivore carnivore omnivore predator canines
Y2	<ul style="list-style-type: none"> <li>Explore and compare the differences between things that are living, dead, and things that have never been alive</li> <li>Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other</li> </ul>	<ul style="list-style-type: none"> <li>Ask simple questions and recognise that they can be answered in different ways including use of scientific language from the national curriculum</li> <li>Use simple equipment to observe closely including changes over time</li> <li>Perform simple comparative tests</li> <li>Identify, group and classify</li> <li>Use his/her observations and ideas to suggest answers to questions noticing similarities, differences and patterns</li> </ul>	<p>Find examples of in surroundings of things that fit into the 3 categories. How do we know it has never been alive?</p> <p>Why do fish live in water? Why do birds nest in trees? What do they need to survive?</p>	<p><b>Y2</b></p> <p>senses nutrition reproduce excrete respire habitat microhabitat fungi survive shelter antennae suitable condition colony insect producer consumer herbivore carnivore omnivore food chain life</p>

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	<ul style="list-style-type: none"> <li>Identify and name a variety of plants and animals in their habitats, including micro-habitats</li> <li>Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food</li> </ul>	<ul style="list-style-type: none"> <li>Gather and record data to help in answering questions including from secondary sources of information</li> </ul>	<p>Draw a food chain which includes the producer and consumers. What is the producer in a food web from the sea?</p>	<p>cycle nutrients rot caterpillar rainforest moisture extinct climate endangered biodiversity deforestation poaching pollution rainforest plankton ocean ecosystem coral reef trench Antarctic Arctic caribou narwhal tundra</p>
<p><b>Y3</b></p>	<p>Not in the NC for this year group, though it will be taught.</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, comparative and fair tests</li> <li>Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</li> <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> </ul>		

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		<ul style="list-style-type: none"> <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> <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 his/her findings</li> </ul>		
<b>Y4</b>	<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 and have an impact on living things</li> </ul>	<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, comparative and fair tests</li> <li>• Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</li> <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>	<p>How can we group animals together? What are common characteristics?</p> <p>Can we group together the children in our class, what could we use? Eye colour? Hair colour? Gender?</p> <p>What is happening now to the animals who live in the rainforest? Can they survive elsewhere?</p>	<p><b>Y4</b> habitat microhabitat conditions adapted camouflage coastal grassland environment climate exposure classify characteristics vertebrate invertebrate species sub-groups identify criteria classification keys organism adapted region features colouring blubber ecosystem oxygenised flowering plant non- flowering plant pond dipping</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 his/her findings</li> </ul>		
<b>Y5</b>	<ul style="list-style-type: none"> <li>Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird</li> <li>Describe the life process of reproduction in some plants and animals</li> </ul>	<ul style="list-style-type: none"> <li>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</li> <li>Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</li> <li>Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</li> <li>Use test results to make predictions to set up further comparative and fair tests</li> <li>Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations</li> <li>Identify scientific evidence that has been used to support or refute ideas or arguments</li> </ul>	<p>Can you describe the life cycle of a human? How does it differ from other animals?</p> <p>How do plants reproduce, do they need other species to help them? If so what and how?</p>	<p><b>Y5</b></p> <p>reproduction asexual fertilisation tuber genes pouch mammary glands placental mammal monotreme mammal marsupial metamorphosis caterpillar amphibian larva pupa egg fledgling egg tooth hatch embryo documentary naturalist primatologist endangered natural sciences living organism reproduction life cycle vertebrate warm-blooded</p>
<b>Y6</b>	<ul style="list-style-type: none"> <li>Describe how living things are classified into broad groups according to common</li> </ul>	<ul style="list-style-type: none"> <li>Plan different types of scientific enquiries to answer their own or others' questions, including recognising and controlling variables where necessary</li> </ul>	<p>Produce a key to classify a number of living things. What questions could you ask to make</p>	<p><b>Y6</b></p> <p>classify microorganism fern living organism conifer kingdom mrs</p>

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	<p>observable characteristics and based on similarities and differences, including micro-organisms, plants and animals</p> <ul style="list-style-type: none"> <li>• Give reasons for classifying plants and animals based on specific characteristics</li> </ul>	<ul style="list-style-type: none"> <li>• Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</li> <li>• Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</li> <li>• Use test results to make predictions to set up further comparative and fair tests</li> <li>• Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations</li> <li>• Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations</li> <li>• Describe and evaluate their own and other people's scientific ideas related to topics in the national curriculum (including ideas that have changed over time), using evidence from a range of sources</li> <li>• Group and classify things and recognise patterns</li> </ul>	<p>sure you were splitting them into the right class? How can you check?</p> <p>What is a characteristic?</p>	<p>gren cell multicellular unicellular Carl Linnaeus classification Latin species domain microorganism bacteria fungi virus protozoa plant microscopic fungi mycelium ecosystem classify microorganism living organism habitat reproduction</p>
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