


Learning journey	Science	Adaptation	Year 4 Spring 2	
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Building on prior learning	Theme overview	Preparing for future learning	Vocabulary	
<p>This links to the last unit covered on living things in their habitats in the spring term. They will have learnt about food chains, identification keys and how humans affect them.</p> <p>In KS1 the children will have learned about habitats and how the seasons affect them.</p>	<ul style="list-style-type: none"> <li>• Environmental change (the seasons, human activity, and climate change) affects different organisms differently and therefore different habitats differently because all organisms in a habitat are interdependent.</li> <li>• Human activity significantly affects the environment</li> <li>• Different organisms are affected differently by environmental change</li> <li>• Animals are adapted to their habitat 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>	<p>Explain what the children will study in the next unit of work and where this will lead in the next year</p> <p>In Y5 children will learn about classification of organisms.</p> <p>In Y6 children will learn about evolution. (How variation and reproduction lead to evolution and adaptation.)</p>	<ul style="list-style-type: none"> <li>• Alive, living and non-living.</li> <li>• Animal (names of animals they will observe in their specific local environment)</li> <li>• Plant (names of plants they will observe in their specific local environment).</li> <li>• Variation.</li> </ul>	<ul style="list-style-type: none"> <li>• Survive, die, migrate, hibernate</li> <li>• Seasons (and names of).</li> <li>• Rainfall, wet, dry, temperature, warm, cold, daylight hours.</li> <li>• Environment, habitat, shelter, food, camouflage.</li> <li>• Adapted, unsuited,</li> <li>• Dependent, interdependent</li> </ul>

NC coverage and HWJS skills development	Knowledge organisers
<p><b>National curriculum coverage:</b></p> <ul style="list-style-type: none"> <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> <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> <p><b>HWJS skills development</b></p> <div data-bbox="208 576 898 957"> <p>What does behaving like scientists mean, can I define it?</p> <p>What must I teach children so they can do these things?</p> <p>1a. Use my scientific knowledge to predict what might happen. → Precise ideas as defined by learning journeys.</p> <ul style="list-style-type: none"> <li>• How to observe closely and carefully enough.</li> <li>• How to measure precisely enough and with appropriate resolution.</li> </ul> <p>1b. Sometimes I will also need to draw upon observations to help me predict</p> <p>2a. Use my scientific knowledge to hypothesise why something happened. → Precise ideas as defined by learning journeys.</p> <ul style="list-style-type: none"> <li>• How to observe closely and carefully enough.</li> <li>• How to measure precisely enough and with appropriate resolution.</li> </ul> <p>2b. Sometimes I will also need to draw upon observations to help me hypothesise, these may be from my own experiments or from secondary sources (e.g. when hypothesising why some planets have more moons than others)</p> <p>3. Plan to investigate how one thing affects another → How to identify, measure and control variables in cause and effect investigations.</p> <p>4. Use evidence to describe how one thing affects another → How to use evidence to describe how one variable affects another.</p> </div> <p><b>A Model of Progression.</b></p> <ol style="list-style-type: none"> <li>Pose problems that require the application of knowledge being taught.</li> <li>Deconstruct the problem to define what a child must understand and be able to do to tackle the problem (including what they need to observe and measure), teach these skills and knowledge <b>at that point.</b></li> <li>As children progress through the curriculum they will tackle problems using new ideas, and when the problem requires with closer observation and more precise measurement.</li> </ol> <p>Good enough progression is being able to tackle these problems</p>	<p><b>On-going through the year:</b></p> <p>Investigate school grounds/ local area and draw pictures of 8 different organisms. Create their own classification key by repeatedly asking dichotomous questions (with exactly two answers) splitting the group up until each group only has one member. They discuss the best sort of questions to ask when making a classification key.</p> <p><b>Longitudinal Study Element.</b></p> <p><i>Select a habitat in your school grounds/local environment. Children draw a picture of how it appears now, and describe or measure the weather, temperature and hours of daylight. They predict what this habitat will look like in 6 months' time and identify any changes that might take place. If possible, children revisit the site in 6 months and investigate the habitat as it actually appears</i></p>

Children gather evidence to describe the relationship between variables (cause and effect) by identifying what must be changed, what measured and what must be kept the same.			
<b><u>Connections / deepening understanding</u></b>	<b><u>RADE</u></b>	<b><u>Assessment</u></b>	
How is the understanding of this area deepened in other areas of the curriculum? What links are there in the other subjects in the curriculum?	Are the rights of the child relevant in this area of study - do they get referred to in the work?	By the end of the unit the children will be able to or describe ...	
Maths – Recording data English – Writing a formal report Geography – How climate and environmental factors can affect what lives in a particular location.		<i>Understand that different habitats are suited to different animals.</i>	<i>Understand how animals adapt according to their environment.</i>
			<i>Identify and study animals within their habitat and observe how living things depend on each other.</i>
<b>Assessment recording for the unit - checking the level of pitch of the work</b>			
<b><u>Key skill(s)/ knowledge to be assessed by the end of the unit</u></b>	<b><u>Lower attaining</u></b>	<b><u>Middle attaining</u></b>	<b><u>Higher attaining</u></b>
<ul style="list-style-type: none"> <li>Understand that different habitats are suited to different animals.</li> <li>Understand how animals adapt according to their environment.</li> <li>Identify and study animals within their habitat and observe how living things depend on each other.</li> </ul>	<p>Children can describe how a chosen habitat is suited to a particular animal.</p> <p>Children can describe how a particular animal is adapted to living in an environment, describing one or two physical adaptations.</p> <p>They observe woodlice in their environment and begin to note how they are physically adapted to their habitat</p>	<p>Children can describe how a chosen habitat is suited to some of the animals or plants that live there.</p> <p>Children can describe how a particular animal is adapted to living in an environment, describing physical adaptations. For some, they can explain how these adaptations are beneficial.</p> <p>They observe woodlice in their environment and note how they are physically adapted to their habitat.</p>	<p>Children can describe how a chosen habitat is suited to the animals and/or plants that live there.</p> <p>Children can describe how a particular animal is adapted to living in an environment, describing physical adaptations. They can explain how these adaptations are beneficial, giving reasons that show how the animal and the habitat are interdependent.</p> <p>They observe woodlice in their environment and note how they are physically adapted to their habitat and how the habitat is beneficial to them.</p>

NB: The assessments are completed for two reasons – to enable the class teacher and in turn the subject leader to evaluate the pitch of the learning within the unit in order to consider any necessary updates and for the class teacher to report to parents on the attainment of pupils in the end of year reports.