

## Science Project Overview Year 2 Living things and their habitats

<p><b>Subject Knowledge (PoS)</b> <b>Substantive knowledge</b></p> <ul style="list-style-type: none"> <li>• Living things move, respire, are sensitive, grow, reproduce, excrete and take in nutrients.</li> <li>• Dead things are not living, but were once alive.</li> <li>• Some things have never lived.</li> <li>• Living things live in habitats to which they are suited.</li> <li>• Different habitats provide for the basic needs of different kinds of animals and plants.</li> <li>• The animals and plants that share the same habitat depend on one another to survive.</li> <li>• A micro habitat is a small habitat that exists within a larger habitat.</li> <li>• Animals obtain their food from plants and other animals; this is called a food chain.</li> </ul>	<p><b>Working Scientifically (PoS+Overview)</b> <b>Disciplinary knowledge</b></p> <ul style="list-style-type: none"> <li>• Be curious and ask questions</li> <li>• Using different types of scientific enquiry to answer their own questions, including: observing changes over a period of time, noticing patterns, grouping and classifying things, carrying out simple comparative tests, and finding things out using secondary sources</li> <li>• Asking simple questions and recognising that they can be answered in different ways</li> <li>• Observing closely, using simple equipment</li> <li>• Performing simple tests</li> <li>• <b>Identifying and classifying</b></li> <li>• Using their observations and ideas to suggest answers to questions</li> <li>• Begin to use simple scientific language to talk about what they have found out and communicate their ideas to a range of audiences in a variety of ways.</li> </ul>	<p><b>WS Methods (Must be done)</b> Using different types of scientific enquiry to answer their own questions, including:</p> <ul style="list-style-type: none"> <li>• observing changes over a period of time,</li> <li>• <b>noticing patterns,</b></li> <li>• <b>grouping and classifying things,</b></li> <li>• carrying out simple comparative tests, <b>and finding things out using secondary sources</b></li> </ul>
<p><b>Previous learning:</b></p> <ul style="list-style-type: none"> <li>• Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. (Y1 - Plants)</li> <li>• Identify and describe the basic structure of a variety of common flowering plants, including trees. (Y1 - Plants)</li> <li>• Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. (Y1 - Animals including humans)</li> <li>• Identify and name a variety of common</li> </ul>	<p><b>Preparing for:</b></p> <ul style="list-style-type: none"> <li>• Recognise that living things can be grouped in a variety of ways. (Y4 - Living things and their habitats)</li> <li>• Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. (Y4 - Living things and their habitats)</li> <li>• Recognise that environments can change and that this can sometimes pose dangers to living things. (Y4 - Living things and their habitats)</li> <li>• Construct and interpret a variety of food chains, identifying producers, predators and prey. (Y4 - Animals, including humans)</li> </ul>	<p><b>Bespoke to our school</b> We are very fortunate to have our own woodland on the school site and have a trained Forest school teacher to give children opportunities to learn outdoors.</p>

<p>animals that are carnivores, herbivores and omnivores. (Y1 - Animals including humans)</p> <ul style="list-style-type: none"> <li>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). (Y1 – Animals, including humans)</li> <li>Observe changes across the four seasons. (Y1 - Seasonal changes)</li> </ul>		
<p><b>Vocabulary:</b>  Living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed  Names of local habitats e.g. pond, woodland etc.  Names of micro-habitats e.g. under logs, in bushes etc.</p>		
<p><b>Misconceptions:</b></p> <ul style="list-style-type: none"> <li>an animal's habitat is like its 'home'</li> <li>plants and seeds are not alive as they cannot be seen to move</li> <li>fire is living</li> <li>arrows in a food chain mean 'eats'.</li> </ul>		
<p><b>Books:</b>  Meerkat Mail  The Gruffalo  <b>Films:</b>  Madagascar</p>		
<p><b>Maths links:</b>  <b>Measurement:</b></p> <ul style="list-style-type: none"> <li>Be able to use appropriate standard units to estimate and measure to the nearest appropriate unit; including length (m/cm), mass (kg/g), temperature (°C), capacity (litres/ml)</li> <li>Use &gt;, &lt; and = to compare and order length, mass, volume/capacity</li> </ul> <p><b>Statistics:</b></p> <ul style="list-style-type: none"> <li>Understand and know how to construct simple pictograms, tally charts, block diagrams and simple tables</li> </ul>		

- Begin to answer questions by counting/sorting, and about totalling/comparing categorical data

**Explorify links:**

Sandy adventurers

Busy bee

Australian animals

Mystery markings

Savannah sidekicks

How would you survive in a rainforest?

**Possible careers/jobs:**

Conservationist (works for the protection and preservation of living things and the environment)

Farmer (grows crops and raises animals for food)

Marine biologist (studies living things in oceans)

Mammologist (studies mammals)

Veterinarian/Vet (looks after unwell animals)

Wildlife filmmaker (creates films and documentaries about wildlife)

Wildlife photographer (takes pictures of animals and plants)