

Year B Term 4 and 5
Unit Overview: KS1 Science
Living Things and their Habitats

<p><u>National Curriculum Objectives</u></p> <ul style="list-style-type: none"> ❖ Explore and compare the differences between things that are living, dead, and things that have never been alive ❖ 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 ❖ Identify and name a variety of plants and animals in their habitats, including micro-habitats ❖ 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 	<p><u>Substantive knowledge</u></p> <ul style="list-style-type: none"> ❖ All objects are either living, dead or have never been alive. ❖ Living things are plants (including seeds) and animals. Dead things include dead animals and plants and parts of plants and animals that are no longer attached e.g. leaves and twigs, shells, fur, hair and feathers. ❖ An object made of wood is classed as dead. Objects made of rock, metal and plastic have never been alive (again ignoring that plastics are made of fossil fuels). ❖ Animals and plants live in a habitat to which they are suited, which means that animals have suitable features that help them move and find food and plants have suitable features that help them to grow well. The habitat provides the basic needs of the animals and plants – shelter, food and water. ❖ Within a habitat there are different micro-habitats e.g. in a woodland – in the leaf litter, on the bark of trees, on the leaves. These micro-habitats have different conditions e.g. light or dark, damp or dry. These conditions affect which plants and animals live there. ❖ The plants and animals in a habitat depend on each other for food and shelter etc. The way that animals obtain their food from plants and other animals can be shown in a food chain. 	<p><u>Vocabulary</u></p> <p>Living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed</p> <ul style="list-style-type: none"> • Names of local habitats e.g. pond, woodland etc. • Names of micro-habitats e.g. under logs, in bushes etc. <p><u>Phonics / polysyllabic words</u></p> <p>Ha/bi/tat Sour/ces Con/di/tions</p> <p><u>Reading support</u></p> <ul style="list-style-type: none"> ❖ Word mats ❖ Scaffolded recording ❖ Pre-teaching of vocabulary
<p><u>Working Scientifically Skills</u></p> <ul style="list-style-type: none"> ❖ Identifying and classifying ❖ Gathering and recording data to help in answering questions ❖ Using appropriate scientific language to communicate ideas. 	<p><u>Disciplinary knowledge</u></p> <ul style="list-style-type: none"> ❖ Can find a range of items outside that are living, dead and never lived. ❖ Can name a range of animals and plants that live in a habitat and micro-habitats that they have studied. ❖ Can talk about how the features of these animals and plants make them suitable to the habitat. ❖ Can talk about what the animals eat in a habitat and how the plants provide shelter for them. 	<p><u>Extension deeper thinking</u></p> <ul style="list-style-type: none"> ❖ Create a new minibeast. Annotate it to show how it is suited to its habitat. ❖ Research some unusual minibeasts from other countries e.g. panda ant, sea pigs, peanut head bug, rhino beetle, coconut crab, Dracula ant, Mexican fireleg tarantula.

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	❖ Can construct a food chain that starts with a plant and has the arrows pointing in the correct direction.	❖ Read picture books to create further food chains
<u>Possible misconceptions</u> Some children may think: <ul style="list-style-type: none"> ❖ an animal's habitat is like its 'home' ❖ plants and seeds are not alive as they cannot be seen to move ❖ fire is living ❖ arrows in a food chain mean 'eats'. 	<u>British Values</u> Democracy <ul style="list-style-type: none"> ❖ Take the views and opinions of others into account using teamwork. ❖ Children take turns and instructions from others. The rule of law <ul style="list-style-type: none"> ❖ Children understand the importance of safety rules when working scientifically. Individual Liberty <ul style="list-style-type: none"> ❖ Children choose which resources to use. ❖ Children are encouraged to develop their independence, taking opportunities to follow their own ideas and interests. ❖ Children engage in a wide range of activities and are not limited by gender or other stereotypes. Mutual Respect and Tolerance <ul style="list-style-type: none"> ❖ Evolution versus faith beliefs 	<u>Key People</u> Prem Singh Gill (Polar Scientist who studies where Antarctic seals live, breed and feed, so we can know more about where they prefer to live) Dawood Qureshi (Marine Biologist who studies wildlife in the ocean) William Kirby (Father of modern entomology, the study of insects)
<u>Prior learning</u> <ul style="list-style-type: none"> ❖ Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. (Y1 - Plants) ❖ Identify and describe the basic structure of a variety of common flowering plants, including trees. (Y1 - Plants) ❖ Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. (Y1 - Animals including humans) ❖ Identify and name a variety of common animals that are carnivores, herbivores and omnivores. (Y1 - Animals including humans) ❖ Describe and compare the structure of a variety of common animals (fish, amphibians, 		<u>School Values</u> Courage

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<p>reptiles, birds and mammals, including pets). (Y1 – Animals, including humans)</p> <ul style="list-style-type: none"> ❖ Observe changes across the four seasons. (Y1 - Seasonal changes) 	<p><u>Future learning</u></p> <ul style="list-style-type: none"> ❖ Recognise that living things can be grouped in a variety of ways. (Y4 - Living things and their habitats) ❖ 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) ❖ Recognise that environments can change and that this can sometimes pose dangers to living things. (Y4 - Living things and their habitats) ❖ Construct and interpret a variety of food chains, identifying producers, predators and prey. (Y4 - Animals, including humans) 	<ul style="list-style-type: none"> ❖ Asking our own questions and investigating new ideas. <p>Respect</p> <ul style="list-style-type: none"> ❖ Supporting other's ideas, even if they differ to our own. <p>Trust</p> <ul style="list-style-type: none"> ❖ Celebrating everyone's unique ideas and working together collaboratively.
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