



## Living Things and Their Habitats

<u>EYFS</u>	<u>Reception</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>
<p>Comment and ask questions about their familiar world, such as the place where they live or the natural world.</p> <p>Show care and concern for living things and the environment.</p> <p>Pupils will recognise: Lavender, rosemary, mint, daffodils, dandelion, grass</p> <p>Pupils will recognise: Spider bee, ladybird, worm</p>	<p>Explore the world around them, making observations and drawing pictures of plants.</p> <p>Pupils will know: blossom, daisies, buttercups, tulips, lime, apple trees, silver birch</p> <p>Pupils will recognise: Butterfly, fly, dragonfly, crane fly, beetle, snail, slug</p>	<p>Explore and compare the differences between things that are living, dead, and things that have never been alive.</p> <p>Know the difference between dead, alive and never been alive. (Are deciduous trees dead in Winter?)</p> <p>Identify and name a variety of plants and animals in their habitats, including microhabitats.</p> <p><u>Pupils will:</u> Recognise and name: ivy, willow, daffodil, poppy, clover, woodlouse, spider, wasp, centipede, millipede, pond skaters</p>	<p>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.</p> <p>Pupils will: Use Forest school to investigate the habitats of : Woodlouse Snail Worm Pond creatures if in Spring and Summer: pond skaters Use cacti in deserts and explore why they are suited. Moss in wet, darker places. Why are they suited?</p> <p>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> <p>Introduce simple food chains. Leaf litter----worms-----birds</p>	

			<p>Main concepts: we are all dependent on each other.</p> <p>Animals need, food, water, shelter, air, light</p> <p>Plants need: soil, light, water,</p>	
<u>Scientist</u>	<u>Scientist</u>	<u>Scientist</u> Steve Backshall	<u>Scientist</u>	<u>Scientist</u>
<u>Enrichment</u>	<u>Enrichment</u> Visit to a Farm	<u>Enrichment</u> Pond dipping in Forest School	<u>Enrichment</u>	<u>Enrichment</u>
<p><u>Year 4</u></p> <p>Recognise that living things can be grouped in a variety of ways. Include ferns, mosses.</p> <p>Pupils will know the observable features of :</p> <p>Mammals Reptiles Amphibians Birds Fish Insects</p> <p>These features will be: Fur, hair, wool, scales, feathers Vertebrate/invertebrate Exoskeleton –insects Number of legs Number of wings Method of movement Cold or warm-blooded Live young or eggs</p>	<p><u>Year 5</u></p> <p>Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</p> <p>Describe the life process of reproduction in some plants and animals.</p> <p>Pupils will: Learn about the gestation periods of an elephant Human Mouse Whale Tiger Gorilla Dog</p> <p>Pupils will learn about: Insect life cycle stages of egg, pupa, larva, nymph, adult as appropriate. Life stages of an amphibian: egg, tadpole, young, adult. Fish: egg, larvae, fry, juvenile, adult</p>	<p><u>Year 6</u></p> <p>Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals.</p> <p>Give reasons for classifying plants and animals based on specific characteristics.</p> <p>Pupils will: Revise the main observable features of mammals, fish, birds, insects, amphibians, reptiles.</p> <p>Learn the characteristics of Invertebrates: Molluscs Crustaceans Arachnids</p>	<p><u>Year 7</u></p> <p>Pupils will: Construct food chains and food webs to investigate feeding relationships.</p> <p>Understand different classifications within vertebrates and invertebrates.</p> <p>To classify within the five different kingdoms: Plant Animal Fungi Protista Monera</p>	

<p>Observe and know the features of ferns and mosses and recognise these in the school grounds.</p> <p>Ferns have stems and leaves and produce spores. Mosses have no roots, non-flowering, have stems and leaves.</p> <p>Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.</p> <p>Recognise that environments can change and that this can sometimes pose dangers to living things.</p> <p>Use simple branching data bases that have already been populated with questions to classify animals.</p> <p>Explore the impact of global warming and the melting of the ice cap on polar bears. How could their features then be a negative rather than a positive feature. How will their ability to find food be impacted and the long term impact on the species.</p>	<p>Birds</p> <p>Look at sexual and asexual reproduction. seeds, cuttings, tubers, bulbs.</p> <p>Asexual and sexual reproduction: Grow plants from a parent plant i.e. stem, spider plant, cuttings Grow from tubers, seeds and bulbs.(season dependent.</p>	<p>Know the difference between invertebrates and vertebrates.</p> <p>Use observable characteristics to classify these animals using given branching databases. Pupils will design their own branching databases where appropriate.</p> <p>Pupils will: Observe, identify fungus, mould, mosses, algae. Revise ferns and mosses. Revise ferns and mosses and their characteristics.</p> <p>Identify non-flowering plants and flowering plants. Flowering have net like leaves or long thin leaves. Non-flowering plants have needle like leaves or fan shaped leaves. These plants produce spores</p> <p>Using the shape of the leaves, decide why each plant is best suited to its habitat. Use: conifers, deciduous trees and the function of the leaf to determine this.: Net leaves are deciduous- mainly Northern hemisphere. Needle shaped : conifers cold and dry conditions Highway:</p> <p>Investigate the positive and negative uses of micro-organisms.</p>	
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<b>Scientist</b> David Attenborough	<b>Scientists</b> Jane Goodall	<b>Scientist</b> Carl Linnaeus	
<b>Enrichment:</b> Twycross Zoo Zoo Lab Classification Workshop	<b>Enrichment</b> Yorkshire Wildlife Park	<b>Enrichment</b>	<b>Enrichment</b>
<b>Possible Careers:</b> Wildlife expert, microbiologist, zoo keeper, marine biologist, research scientist (Cancer research ), Laboratory technician, ecologist, pharmacist, forensic scientist, vet,			
<b><u>Common misconceptions.</u></b>			

Year groups	Vocabulary/Statements
Birth to 3	Explore natural materials, indoors and outside.
Nursery	natural, plant, animal, leaves, seeds, conkers, acorns, twigs, bark, shells, feathers, pebbles, stones, same, different, pattern

	plant, leaf, stem, branch, root, bark, flower, petal, seed, berry, fruit, vegetable, bulb, plant, hole, dig, water, weed, grow, shoot, die, dead, soil (Nursery - Plants)
Reception	plant, tree, bush, flower, vegetable, herb, weed, animal, names of plants and animals they see, name of a contrasting environment (e.g. beach, forest)
Year 1	names of garden and wild flowering plants in the local area (Y1 - Plants) head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves, names of animals experienced first-hand from each vertebrate group (Y1 - Animals, including humans) weather, sunny, rainy, raining, shower, windy, snowy, cloudy, hot, warm, cold, storm, thunder, lightning, hail, sleet, snow, icy, frost, puddles, rainbow, seasons, winter, summer, spring, autumn, Sun, sunrise, sunset, day length (Y1 - Seasonal changes)
Year 2	living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed, water, air, survive, survival, names of local habitats (e.g. pond, woodland etc.), names of micro-habitats (e.g. under logs, in bushes etc.), conditions, light, dark, shady, sunny, wet, damp, dry, hot, cold, names of living things in the habitats and micro-habitats studied light, shade, Sun, warm, cool, water, space, grow, healthy, bulb, germinate, shoot, seedling (Y2 - Plants) offspring, reproduction, growth, baby, toddler, child, teenager, adult, old person, names of animals and their babies (e.g. chick/chicken, cat/kitten, caterpillar/butterfly) (Y2 - Animals, including humans)
Year 3	photosynthesis, pollen, insect/wind pollination, male, female, seed formation, seed dispersal (e.g. wind dispersal, animal dispersal, water dispersal), air, nutrients, minerals, soil, absorb, transport (y3 plants)
Year 4	classification, classification keys, environment, habitat, human impact, positive, negative, migrate, hibernate herbivore, carnivore, omnivore, producer, predator, prey (Y4 - Animals, including humans)
Year 5	life cycle, reproduce, sexual, sperm, fertilises, egg, live young, metamorphosis, asexual, plantlets, runners, cuttings
Year 6	vertebrates, fish, amphibians, reptiles, birds, mammals, warm-blooded, cold-blooded, invertebrates, insects, spiders, snails, worms, flowering, non-flowering, mosses, ferns, conifers
KS3	Reproduction in humans (as an example of a mammal), including the structure and function of the male and female reproductive systems, menstrual cycle (without details of hormones), gametes, fertilisation, gestation and birth, to include the effect of maternal lifestyle on the foetus through the placenta <ul style="list-style-type: none"> <li>• The consequences of imbalances in the diet, including obesity, starvation and deficiency diseases</li> <li>• The effects of recreational drugs (including substance misuse) on behaviour, health and life processes</li> <li>• The structure and functions of the gas exchange system in humans, including adaptations to function</li> <li>• The mechanism of breathing to move air in and out of the lungs</li> <li>• The impact of exercise, asthma and smoking on the human gas exchange system</li> </ul>