

## Year 2 Science Curriculum

Working scientifically links    Rubric/PCMD opp.    Key Vocabulary

### Living things and their habitats

**What's the big picture?** Living things depend on each other and their environment to survive - children to generate own questions for investigation “*I know how to ask simple scientific questions*”

**Prior learning:**

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, reptiles, birds and mammals, including pets). (Y1 - Animals, including humans)

Observe changes across the four seasons. (Y1 - Seasonal changes)

National Curriculum Principles	Objectives	Knowledge and key Vocabulary	Reading opportunities	Technology
Explore and compare the differences between things that are living, dead, and things that have never been alive	I can identify things that are living, dead and never lived	Know that all objects are either living, dead or have never been alive. Sort items according to whether they are <b>living, dead or never lived.</b> <b>Classification.</b>  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 (This is a simplification, but appropriate for Year 2 children.) 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). Explain meaning of living (Mrs Gren) <b>Move, respire, Sense, Grow, Reproduce, Excrete, Nutrition</b>	The Gruffalo (Julia Donaldson)  Meerkat Mail (Emily Gravett)  No Place Like Home (Jonathon Emmett)	Use video to explain their classifications
Identify that most living things live in habitats to which	I know how a specific habitat provides for the	What is a <b>habitat</b> ? Animals and plants live in a habitat to which they are suited. Look at different types of habitat - <b>woodland, desert, ice and ocean.</b> What do living things get from their habitat? <b>Food, water,</b>		Describe the habitat..use the camera to

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they are suited. Describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other	basic needs of things living there (plants and animals)	<b>shelter</b>  Within a habitat there are different <b>micro habitats</b> . Micro habitats have different conditions e.g. light, dark, damp, dry. These conditions affect which plants and animals live there.		take photos of habitats. Annotate (Seesaw) with voice descriptions.
Identify and name a variety of plants and animals in their habitats, including micro- habitats	I identify and name plants and animals in a range of habitats	Identify/classify and name things in: <ul style="list-style-type: none"> <li>• woodland - oak tree, grass, bluebell, owl, rabbit, fox and mouse</li> <li>• Desert - cacti, camel, scorpion, lizards,</li> <li>• Ice - penguin, seals, whales, plankton</li> <li>• Ocean - seaweed, crabs, fish, dolphin, sharks, whales</li> <li>• Micro habitat - mini beast hunt in school grounds - <b>observe, identify, classify</b></li> </ul> <p>Complete a double page spread</p>		Use Safari to search for names of animals that live in the different habitats.
	I can match living things to their habitat	Match living things to their 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.	I know how animals find their food  I can name some different sources of food for animals I can explain a simple food chain	Why do animals need to eat - <b>survival</b> and <b>energy</b> . What do animals eat? - <b>herbivore, carnivore, omnivore</b>  Record data - venn diagram		
	I know and can explain a simple food chain.	Children to build and explain simple <b>food chains, producer, consumer, primary secondary</b>		

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### Famous scientists

Rachel Carson - marine pollution

### Common misconceptions

Some children may think:

- 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'.

### Enquiry ideas

<u>Comparative tests</u>	<u>Identify and classify</u>	<u>Observations over time</u>	<u>Pattern seeking</u>	<u>Research</u>
Is there the same level of light under evergreen trees compared with deciduous trees?	How could you group these plants and animals?	How do our school grounds change over the year?	What conditions do woodlice prefer to live in?	How does the habitat of the Arctic compare with the habitat of the rainforest?
			Where can we find the most worms?	