

## Year 4 Science Curriculum

Working scientifically links   Rubric/PCMD opp.   Key Vocabulary

### Living Things and their Habitats

**What's the big picture?** Recap prior knowledge from Year 2 unit - 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)

Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). (Y1 - Animals, including humans)

Identify and name a variety of plants and animals in their habitats, including microhabitats. (Y2 - Living things and their habitats)

National Curriculum Principles	Objectives	Knowledge and key Vocabulary	Reading opportunities	Technology
Recognise that living things can be grouped in a variety of ways	I can group living things in different ways	Children to use <b>classification key</b> to identify whether animals are <b>birds, fish, reptiles, amphibians or mammals</b>	There's a Rang Tan in my bedroom (James Sellick)	
Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment	I can use classification keys to group, identify and name living things	To identify features of different groups of animals: Birds - have <b>feathers</b> , have <b>wings</b> , lay eggs Fish - <b>gills, fins</b> Mammals - have <b>hair/fur</b> , live young Reptiles - <b>scales, cold blooded</b> , usually lay eggs Amphibians - Moist skin, cold blooded, usually lay eggs. Live in water and on land <b>Observe plants and animals in different habitats throughout the year and keep a record of things found.</b>	The Vanishing Rainforest (Richard Platt)  The Morning I Met a Whale (Michael Morpurgo)	
	I can create classification keys to group, identify and name living	Children to build their own <b>classification key</b> using liquorice all sorts  Children to build their own key linked to project	Journey to the River Sea (Eva Ibbotson)	

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	things (for others to use)	Use <b>classification keys</b> to name unknown living things.		
Recognise that environments can change and that this can sometimes pose dangers to living things	I know how changes to an environment could endanger living things	Use secondary sources to explore how environments change naturally. Use secondary sources to find out about human impact e.g. plastic pollution ( <b>use charts, tables, diagrams, graphs</b> ). Links to project - oral and written presentation <a href="#">Complete a double page spread</a>		

### Famous scientists

Jacques Cousteau - marine biology

Some children may think:

- the death of one of the parts of a food chain or web has no or limited consequences on the rest of the chain
- there is always plenty of food for wild animals

### Common misconceptions

- animals are only land-living creatures
- animals and plants can adapt to their habitats, however they change
- all changes to habitats are negative.

### Enquiry ideas

<u>Comparative tests</u>	<u>Identify and classify</u>	<u>Observations over time</u>	<u>Pattern seeking</u>	<u>Research</u>
Does the amount of light affect how many woodlice move around?	Can we use the classification keys to identify the minibeasts in our Forest school?	How does the variety of invertebrates on the school field change over the year?		Why are people cutting down the rainforest and what effect does that have?