



Year 6 – Living things and their habitats



Working Scientifically	Sticky Knowledge	Linked Texts	Key Scientists
- Plan different types of scientific enquiries to answer questions, include recognise and control variables where necessary - Recognise when and how to set up comparative and fair tests and explain which variables need to be controlled and why - Take measurements, use a range of scientific equipment, with increasing accuracy and precision, take repeat readings when appropriate - Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs - Use test results to make predictions to set up further comparative and fair tests - Report and present findings from enquiries, include conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations - Identify scientific evidence that has been used to support or refute ideas or arguments. - Use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas	• Variation exists within a population (and between offspring of some plants) - <i>NB: this Key Idea is duplicated in Year 6 Evolution and Inheritance.</i> • Organisms best suited to their environment are more likely to survive long enough to reproduce. • Organisms are best adapted to reproduce are more likely to do so. • Organisms reproduce and offspring have similar characteristic patterns. • Competition exists for resources and mates.	Beetle Boy (M G Leonard) Insect Soup (Barry Louis Polisar) Fur and Feathers (Janet Halfmann)	Carl Linnaeus (Identifying, Naming and Classifying Organisms) Agnes Arber (Botanist) Beatrix Potter (Mycologist, funghi)
	From Yr 4 Living things can be divided into groups based upon their characteristics Environmental change affects different habitats differently Different organisms are affected differently by environmental change Different food chains occur in different habitats Human activity significantly affects the environment		
Key Question(s):	Key Question(s):	WS vocabulary	
Can you describe the features of an amphibian, and give examples? Why is 'mammal' a broad group of classification? Why is classification important? Which characteristics are used when classifying plants and animals? Give examples. What is the name of the given to a scientist who studies plants and how are plants classified? Can you explain what a branching tree and how it is used? Who is Carl Linnaeus and what is he famous for?	How do we classify? What are the difficulties with classification? (penguins, whales, platypus) How do animals change over time? Why does variation exist? What happens if animals of different species breed? (hybrids) What happens to house plants outside? What are microorganisms? How can we prevent the spread of disease? Why do animals and plants compete - and what for?	Investigation, enquiry, prediction, variable, dependent variable, independent variable, constant, patterns, equipment, apparatus, method, results, conclusion, graph, patterns, distance, data, theory, fair test, reasoning	

Teaching suggestions in Enquiry types

<u>Comparative tests</u>	<u>Identify & Classify</u>	<u>Observation over time</u>	<u>Pattern Seeking</u>	<u>Research</u>	<u>BIG Question – Problem solving</u>
How does the temperature affect how much gas is produced by yeast? Which is the most common invertebrate on our school playing field? 	How would you make a classification key for vertebrates/invertebrates or microorganisms? 	What happens to a piece of bread if you leave it on the windowsill for two weeks? 	Do all flowers have the same number of petals? 	What do different types of microorganisms do? Are they always harmful? 	In what ways can we sort living things? (Also use EXPLORIFY) <u>Assessment Opportunity</u> 