



Knowledge Organiser - Year Four

Classification of Living Things



Key Concept: Biology (study of living things. Bios is Greek for life).

B2: Living things on Earth come in a huge variety of different forms that are all related because they all came from the same starting point 4.5 billion years ago.

B3: The different kinds of life, animals, plants and microorganisms, have evolved over millions of generations into different forms in order to survive in the environments in which they live.



Vital Vocabulary:	Definition:
characteristics	A quality or appearance that makes an individual or a group different to others.
classification	Grouping things based on their characteristics so that they can be identified.
consumer	A consumer eats producers or other consumers in a food chain.
hibernate	An animal or plant that spends the winter asleep.
invertebrate	An animal that does not have a backbone, for example snails and worms.
migrate	The long-distance movement of animals, usually due to a change in the seasons.
predator	An organism that eats another organism, for example lions and foxes.
prey	The organism that a predator eats, for example rabbits and fish.
producer	An organism that makes its own food, such as a plant.
vertebrate	An animal that has a backbone, for example; fish, reptiles and mammals.

Classification:

Vertebrates

Animals with backbones

Invertebrates

Animals without backbones

A classification key is a series of yes/no questions that help to identify or classify things.

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graph TD
    Q1[Has the animal got legs?] -- YES --> Q2[Has it got wings?]
    Q1 -- NO --> Q3[Has it got a shell?]
    Q2 -- YES --> B1[ ]
    Q2 -- NO --> Q4[Has it got more than 8 legs?]
    Q3 -- YES --> B2[ ]
    Q3 -- NO --> Q5[Are the antennae feathery?]
    Q4 -- YES --> B3[ ]
    Q4 -- NO --> B4[ ]
    Q5 -- YES --> B5[ ]
    Q5 -- NO --> B6[ ]
  
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Scientific Enquiry: Can you remember the five types of enquiry and their meanings?

Vital Vocabulary:		Definition:
Observing (over time).		Watch and see how something changes over time.
Pattern Seeking		Spotting any patterns in what you have seen.
Identifying, classifying, grouping		Features that allow things to be organised into groups.
Comparative and fair testing		KS1: Compare one thing to another (Comparative testing). KS2: Measure the effect of changing one thing while everything else remains the same.
Researching (using secondary sources)		Gather information to answer questions and help explain events.

How can environments change?		
Natural	This could be caused by flooding, fire, earthquakes etc.	
Human Impact	Negative impact Littering, deforestation, air pollution, plastics in the oceans.	Positive Impact Setting up a nature reserve, tree planting, creating a garden pond.