



LIVING THINGS and their habitats

KNOWLEDGE ORGANISER



What you should already know...



- Animals and plants can be classified into different groups based on their characteristics.
- Animals can be grouped into vertebrates (with a backbone) and invertebrates (without a backbone).
- They can then be subdivided into further groups, for example mammals, fish, reptiles etc. (vertebrates) or spiders, snails, worms etc. (invertebrates).
- Plants are commonly grouped into flowering plants and non-flowering plants. They too can be sub-divided beyond these broad classifications.

What? (Key Vocabulary)

Spelling	Definition/Sentence
Taxonomy	The part of science focused on classification
Classification	Grouping something using its features
Distinguish	Recognise a difference
Microorganism	A microscopic organism

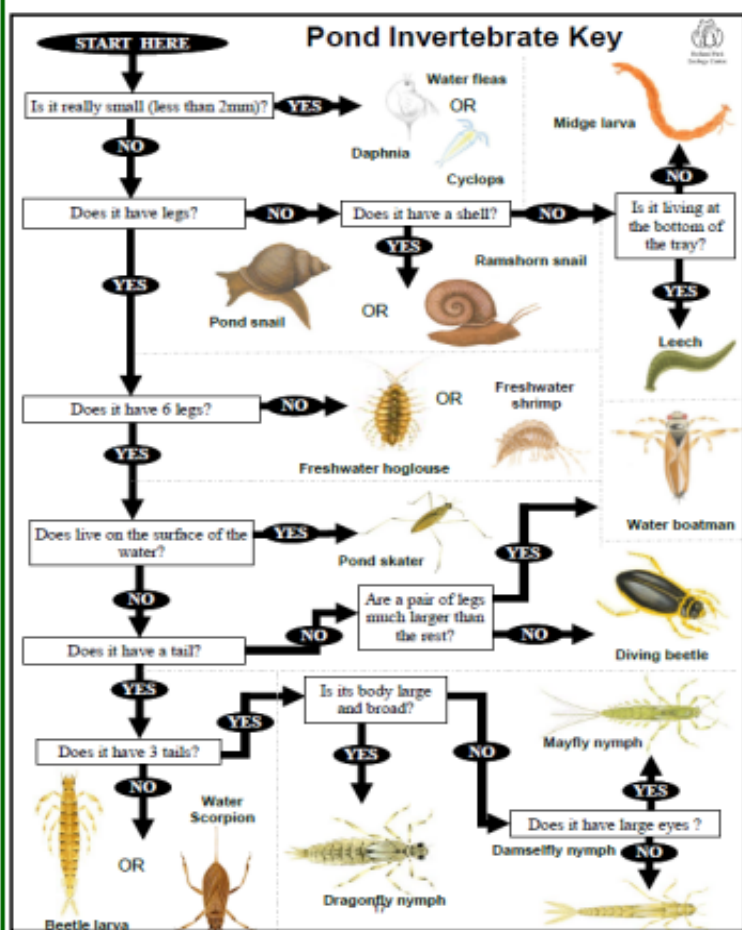
Who? (Scientists we need to know about)

3 facts about
Carl Linnaeus



- Born in Sweden on 23rd May 1707
- A leading light in the field of Taxonomy
- Famous for developing the first system to classify animals effectively

Diagrams and Symbols



What? (Key Knowledge)

Grouping living things	
Animals can be put into one of two groups	Vertebrates or invertebrates
Vertebrates	
Vertebrates	Are animals with a backbone
There are 5 ways Vertebrates can be grouped	Fish, amphibians, reptiles, birds, mammals
How to spot a Fish	• Breathes with gills/lays eggs in water/has fins and scales/its body temperature changes
How to spot an Amphibian	• Born with gills then develops lungs/lays eggs in water/damp skin/body temperature changes
How to spot a Reptile	• Breathes with lungs/lays eggs on land/dry scaly skin/body temperature changes
How to spot a Bird	• Breathes with lungs/lays eggs with hard shells/has feathers/steady body temperature
How to spot a Mammal	• Breathes with lungs/babies are born live/body hair or fur/steady body temperature/feeds babies milk
Invertebrates	
Invertebrates	Are animals with no backbone
There are 3 ways Invertebrates can be grouped	• Insects • Arachnids • Molluscs
How to spot an Insect	• 3 body sections/6 legs
How to spot an Arachnid	• 2 body sections/8 legs
How to spot a Mollusc	• Slimy foot/Often have a shell
Deciding which animal or plant is which	
Key Features to distinguish between animals	• Invertebrate or vertebrate
	• Mammal/reptile/fish/amphibian/bird
	• Colour
	• Length
Key Features to distinguish between plants	• Number of legs
	• Number of body segments
	• Distinguishing features
	• Habitat
Key Features to distinguish between plants	• Flowering or non-flowering
	• Grass/cereal/garden shrub/deciduous/algae/coniferous/fern
	• Colour
	• Height
Key Features to distinguish between plants	• Number of flowers
	• Fruit bearing or not
	• Distinguishing features
	• Usual location
Microorganisms	
Key features of microorganisms	• Include algae, fungi, protozoa, bacteria and viruses
	• Smallest organisms on Earth
	• They perform photosynthesis, break down waste and infect other organisms