



**Objectives and Sticky Knowledge**

**Previous Knowledge:**

Know the basic stages in a life cycle for animals, (including humans) Classify things by living, dead or never lived.  
 Know how a specific habitat provides for the basic needs of things living there (plants and animals).  
 Match living things to their habitat.  
 Name some different sources of food for animals.  
 Know about and explain a simple food chain.



**Land Objectives and Sticky Knowledge:**

<p>- Use classification keys to group, identify and name living things.</p>	<p>- Know how changes to an environment could endanger living things.</p>	<p>- Use and construct food chains to identify producers, predators and prey.</p>
<p>1. Vertebrates can be separated into five broad groups: mammals, fish, birds, reptiles, amphibians.</p> <p>2. Invertebrates are animals without a spine. Examples include: worms, insects, slugs, snails.</p> <p>3. Classification keys are a series of questions that lead to identifying the group a living thing belongs to.</p>	<p>1. Changes to an environment can be natural or caused by humans. Changes to an environment can have positive as well as negative effects.</p> <p>2. Natural changes include: • earthquakes • storms • floods • droughts • wildfires • the seasons</p> <p>3. Human-made changes include: • deforestation • pollution • urbanisation • the introduction of new animal or plant species to an environment • creating new nature reserves</p> <p>4. Plants and animals rely on the environment to give them everything they need. Therefore, when habitats change, it can be very dangerous to the plants and animals that live there.</p>	<p>1. A food chain is a series of organisms which each depend on the previous stage in the chain for food. For example, grass is eaten by rabbits, and rabbits are eaten by hawks, so a simple food chain would be grass, rabbit, hawk. In nature, there are lots of food chains that all interlink with each other across different biomes and habitats. This is called a food web.</p>

**Sea:**

Links with Golden Thread of 'Freedom'

[Links to CST and CKA values](#)

# Year 4 Science Knowledge Organiser

## Key Vocabulary

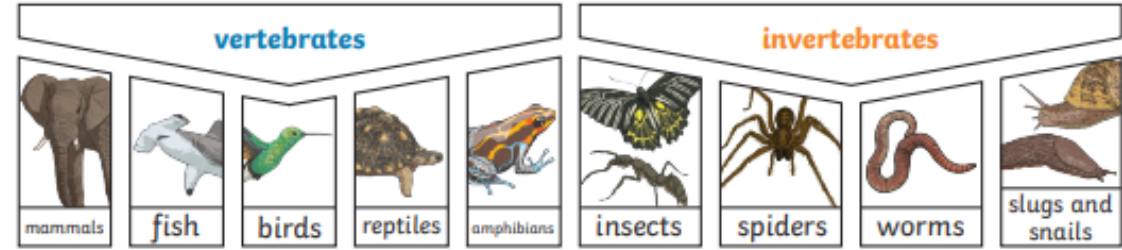
classification	This is where plants or animals are placed into groups according to their similarities.
vertebrates	Animals with a backbone.
characteristics	The distinguishing features or qualities that are specific to a species
specimen	A particular plant or animal that scientists study to find out about its species.
invertebrates	Animals without a backbone.



Sky Objectives:

1. Begin to understand which types of enquiry can be used to answer questions.
2. Conduct comparative tests and explain the changes in results.
3. Use concluding remarks to begin to make predictions for future investigations.

Animals can be grouped in lots of different ways based upon their **characteristics**.

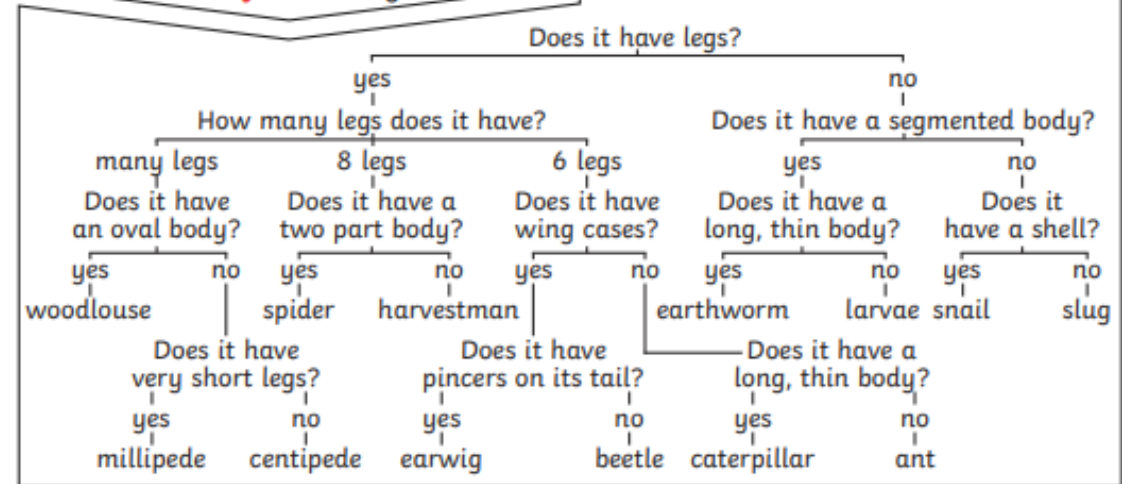


**Vertebrates** can be separated into five broad groups.

You could sort **invertebrates** you might see around school in different ways, such as in this example. The vast majority of living things on the planet are **invertebrates**.

You can use **classification** keys to help group, identify and name a variety of living things. Here is an example of a **classification** key:

### Invertebrate Classification Key



Plants can be sorted into many different groups. For example:

