



# Year 6 - Living Things and Habitats

Key Vocabulary	
<b>organisms</b>	This is another word that can be used to mean 'living things'.
<b>life processes</b>	The things living things do to stay alive.
<b>respiration</b>	A process where plants and animals use oxygen gas from the air to help turn their food into energy.
<b>sensitivity</b>	The way living things react to changes in their <b>environment</b> .
<b>reproduction</b>	The process through which young are produced.
<b>excretion</b>	The process by which living things get rid of waste products.
<b>nutrition</b>	Food which provides living things with energy to live and stay healthy.
<b>habitat</b>	The specific area or place in which particular animals or plants may live.
<b>environment</b>	An <b>environment</b> contains many <b>habitats</b> and these include areas where there are both living and non-living things.
<b>endangered species</b>	A plant or animal where there are not many of their species left and scientists are concerned that the species may become <b>extinct</b> .
<b>extinct</b>	When a species has no more members alive on the planet, it is <b>extinct</b> .

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



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

## Linnaeus Classification

**Carl Linnaeus**

Carl Linnaeus was a Swedish scientist, botanist and zoologist who is known as the 'father of taxonomy.'

He created something called the binomial nomenclature, which was a way of classifying plants and animals (taxonomy).

He classified man among the primates, which brought him criticism at the time!

He was made a noble by the Swedish King. He lived from 1707-1778. Parts of his system are still used today.

**Classification System**

Linnaeus gave each organism a two part Latin scientific name, based on their genus and species. A genus is a group made up of several species.

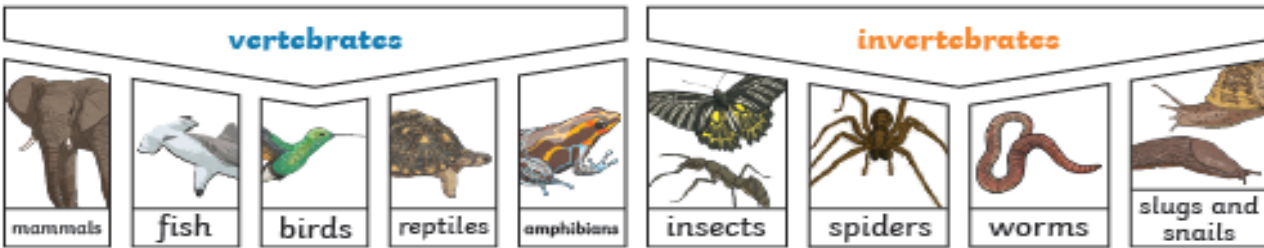
For example, the genus 'Pan' is made up of the chimpanzee (*pan troglodytes*) and the bonobo (*pan paniscus*).

His scientific process involved observing, recording the information and making conclusions.

Linnaeus's System of Classification

- Kingdom
- Phylum
- Class
- Order
- Family
- Genus
- Species

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

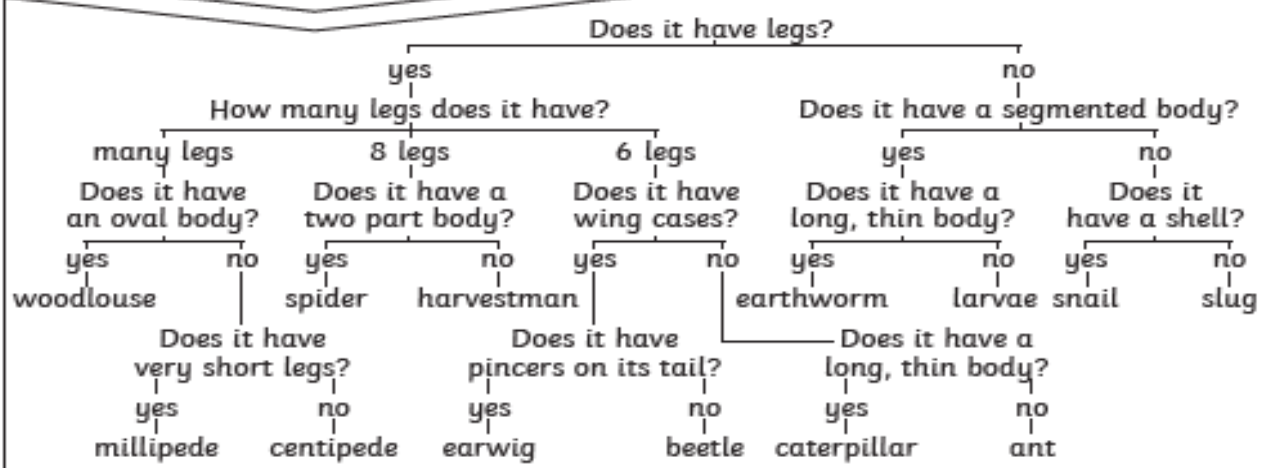


**Vertebrates** can be separated into five broad groups.

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

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**.

### Invertebrate Classification Key



## Helpful or Harmful?

These examples show some of the helpful uses of microorganisms.

<p>Bacteria are used to ferment milk as part of the cheese making process.</p>	<p>Yeast ferments the carbohydrates found in grapes to make alcoholic wine.</p>	<p>Yoghurt is made using milk that has been soured by bacteria.</p>
<p>Yeast is added to bread dough to make it rise.</p>	<p>Microorganisms feed on leaves, plants and other matter, decomposing it and creating compost.</p>	<p>Antibiotics are used to kill bacteria that cause infections. They are created from fungi such as Penicillium.</p>



## Helpful or Harmful?

These examples show how microorganisms can be harmful to us. Harmful microorganisms are often called germs.

<p>Food poisoning can be caused by bacteria that grow on uncooked or undercooked food.</p>	<p>Chicken pox is caused by a virus. It spreads very easily.</p>	<p>The influenza virus causes flu symptoms, such as a headache and fever.</p>
<p>Athlete's foot is caused by a fungus that grows between the toes.</p>	<p>Plaque on our teeth is formed when bacteria in the mouth combine with small food particles.</p>	<p>The fungi that grow on food are called moulds. Mould can make you ill if you eat it.</p>