

### Key Vocabulary

<b>characteristics</b>	Special qualities or appearances that make a individual or group of things different to others.
<b>classify</b>	To sort things into different groups.
<b>taxonomist</b>	A scientist who classifies different living things into categories.
<b>key</b>	A key is a series of questions about the characteristics of living things. A key is used to identify a living thing or to decide which group it belongs to by answering yes or no questions.
<b>bacteria</b>	A single-celled microorganism.
<b>microorganism</b>	An organism that can only be seen using a microscope., e.g. bacteria
<b>microscope</b>	A piece of equipment that is ysed to view very tiny things
<b>species</b>	A group of animals that can reproduce to produce fertile offspring

### Key knowledge

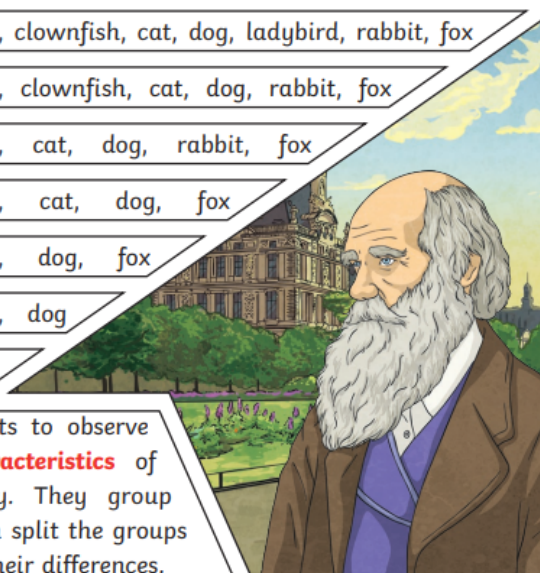
#### Classification

In 1735, Swedish Scientist Carl Linnaeus first published a system for **classifying** all living things. An adapted version of this system is still used today: The Linnaeus System.



Living things can be **classified** by these eight levels. The number of living things in each level gets smaller until the one animal is left in its species level. This is how a dog would be classified.

<b>Domain: Eukarya</b>	jackal, clownfish, cat, dog, ladybird, daisy, rabbit, fox
<b>Kingdom: Animalia</b>	jackal, clownfish, cat, dog, ladybird, rabbit, fox
<b>Phylum: Chordata</b>	jackal, clownfish, cat, dog, rabbit, fox
<b>Class: Mammalia</b>	jackal, cat, dog, rabbit, fox
<b>Order: Carnivora</b>	jackal, cat, dog, fox
<b>Family: Canidae</b>	jackal, dog, fox
<b>Genus: Canis</b>	jackal, dog
<b>Species: Lupus</b>	dog



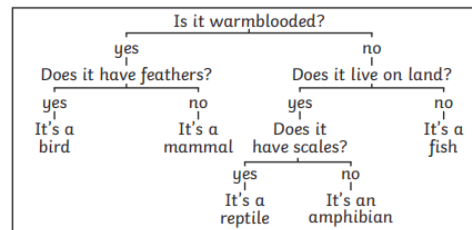
Each group allows scientists to observe and understand the **characteristics** of living things more clearly. They group similar things together then split the groups again and again based on their differences.

### Other Famous Scientists



Chris Nelson  
Horticulturalist

Scientists, called Taxonomists, sort and group living things according to their similarities and differences.



Helpful Microbes	Harmful Microbes
<b>Bacteria</b> – cheese	<b>Bacteria</b> – salmonella is a bacterium that can lead to food poisoning
Yeast – wine	Virus – chicken pox and flu are examples of viral diseases
<b>Bacteria</b> – yoghurt	Fungi – athlete's foot
Yeast – bread dough	<b>Bacteria</b> – plaque
Penicillium fungi - antibiotics	Fungi - mould

### Investigation

Can children report and present information about an invertebrate classification group?

Why is that invertebrate part of that group?

What scientific visual aids will help you to illustrate how your invertebrates are classified?

### What we will learn

- Describe how living things are classified into broad groups according to common, observable characteristics and based on similarities and differences
- Give reasons for classifying plants and animals based on specific characteristics