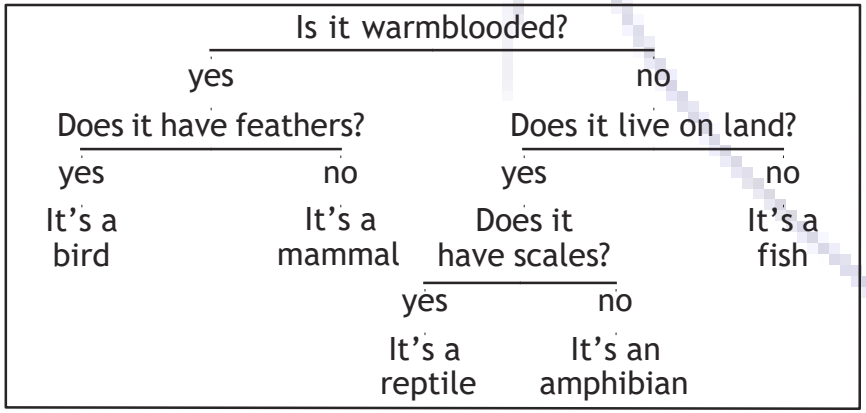
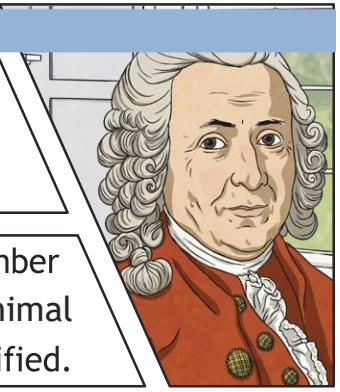
Key Vocabulary	
characteristics	Special qualities or appearances that make an individual or group of things different to others.
classify	To sort things into different groups.
taxonomist	A scientist who classifies different living things into categories.
key	A **key** is a series of questions about the **characteristics** of living things. A **key** is used to identify a living thing or decide which group it belongs to by answering 'yes' or 'no' questions.

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



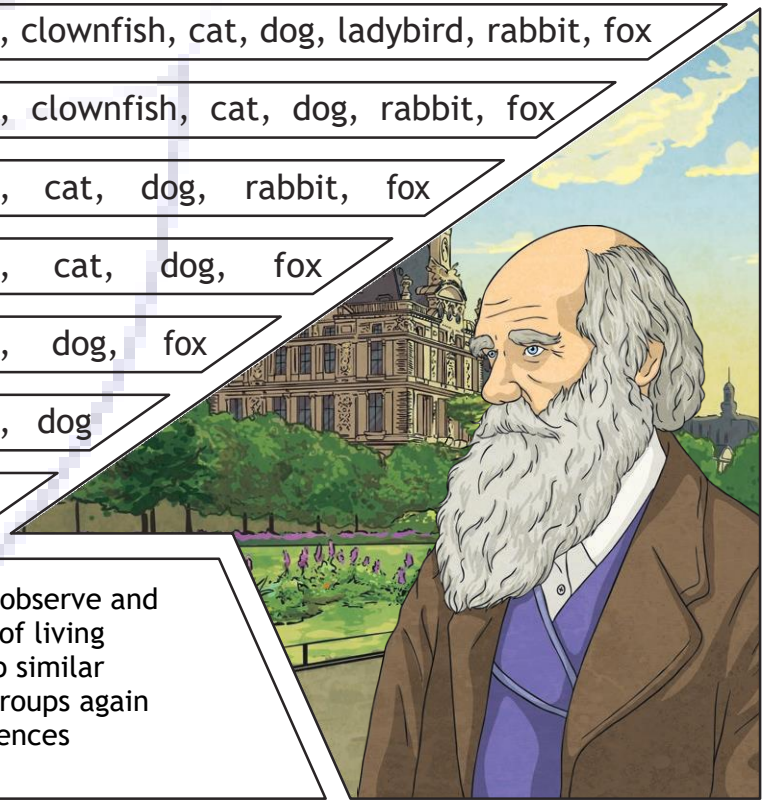
Classification



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.

Domain: Eukarya	jackal, clownfish, cat, dog, ladybird, daisy, rabbit, fox
Kingdom: Animals	jackal, clownfish, cat, dog, ladybird, rabbit, fox
Phylum: Chorodata	jackal, clownfish, cat, dog, rabbit, fox
Class: Mammals	jackal, cat, dog, rabbit, fox
Order: Carnivore	jackal, cat, dog, fox
Family: Canidae	jackal, dog, fox
Genus: Canis	jackal, dog
Species: Lupus	dog



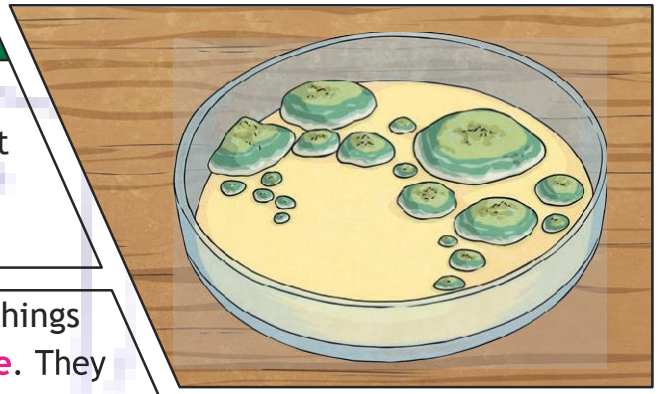
Each group allows scientists to observe and understand the characteristics of living things more clearly. They group similar things together then split the groups again and again based on their differences

Key Vocabulary	
bacteria	A single-celled **microorganism**.
microorganism	An organism that can only be seen using a **microscope**, e.g. **bacteria**, mould and yeast.
microscope	A piece of equipment that is used to view very tiny (**microscopic**) things by magnifying their appearance.
species	A group of animals that can reproduce to produce fertile offspring.

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

Microorganisms

Microorganisms are viruses, bacteria, moulds and yeast. Some animals (dust mites) and plants (phytoplankton) are also microorganisms.



Microorganisms are very tiny living things that can only be seen using a microscope. They can be found in and on our bodies, in the air, in water and on objects around us.