



What your child should already know:

- recognise that living things can be grouped in a variety of ways.
- explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.

By the end of the unit, your child should be able to:

- describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals
- give reasons for classifying plants and animals based on specific characteristics.
- Identify the main types of microorganisms and what causes them to propagate and transmit.

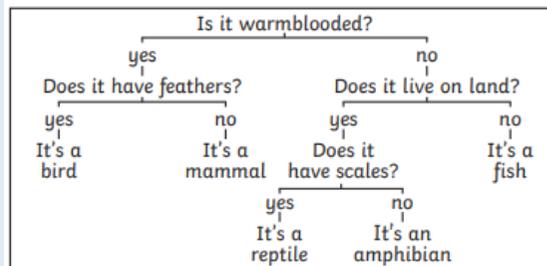
Classification

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.

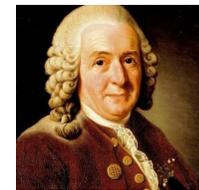
Each group allows scientists to observe and understand the **characteristics** of living things more clearly. They group similar things together then split the groups again and again based on their differences.

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



Key Vocabulary

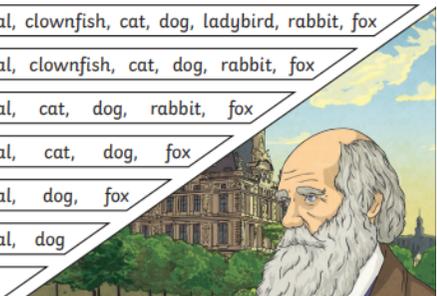
Word	Meaning
characteristics	Special qualities or appearances that make an individual or group of things different to others.
classify	To sort things into different groups.
taxonomist	A scientist who classifies different living things into categories.
key	A key is a series of questions about the characteristics of living things. A key is used to identify a living thing or decide which group it belongs to by answering



The Linnaeus System

Below is an example of how a dog would be classified.

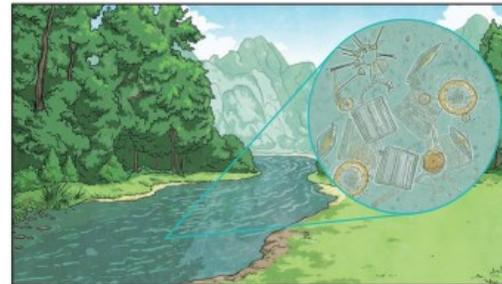
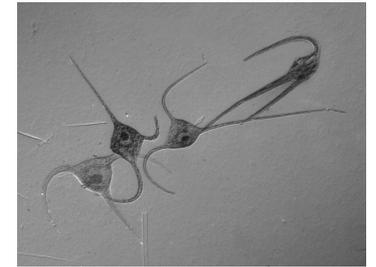
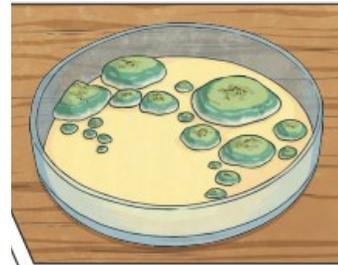
Domain: Eukarya	jackal, clownfish, cat, dog, ladybird, daisy, rabbit, fox
Kingdom: Animals	jackal, clownfish, cat, dog, ladybird, rabbit, fox
Phylum: Chordata	jackal, clownfish, cat, dog, rabbit, fox
Class: Mammals	jackal, cat, dog, rabbit, fox
Order: Carnivore	jackal, cat, dog, fox
Family: Canidae	jackal,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



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.



Key Vocabulary

Word	Meaning
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.
Propagate	Increase in the numbers of bacteria microbes.
Transmit	Passing on the disease.

Helpful Microbes

Bacteria – cheese

Yeast – wine

Bacteria – yoghurt

Yeast – bread dough

Penicillium fungi- antibiotics

Harmful Microbes

Bacteria – salmonella is a bacterium that can lead to food poisoning.

Virus – chicken pox and flu are examples of viral diseases.

Fungi – athlete's foot

Bacteria – plaque

Fungi - mould

Diseases can spread by...



- Coughs/Sneezing (Air)
- Water
- Food
- Touch
- Animals