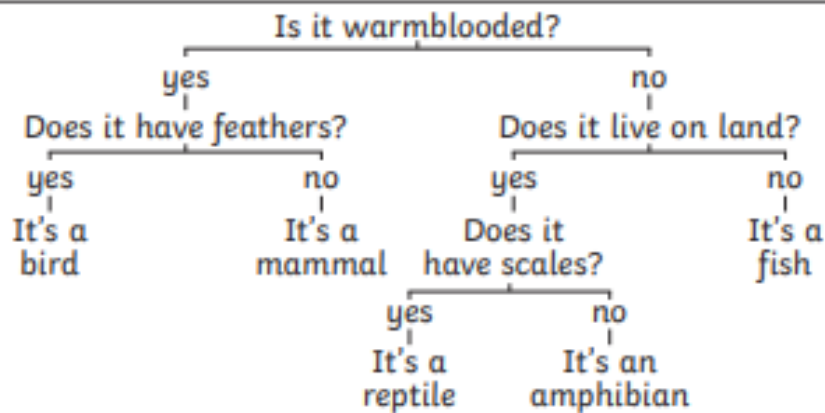


## Key Vocabulary

Classify  
Compare  
Carl Linnaeus  
Domain  
Kingdom  
Key Model  
Species  
Characteristics  
Vertebrates  
Invertebrates  
Microorganisms  
Organism  
Flowering  
Non-flowering

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: 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

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 Questions:

How can living things be classified?

What similarities and differences can we observe between living things?

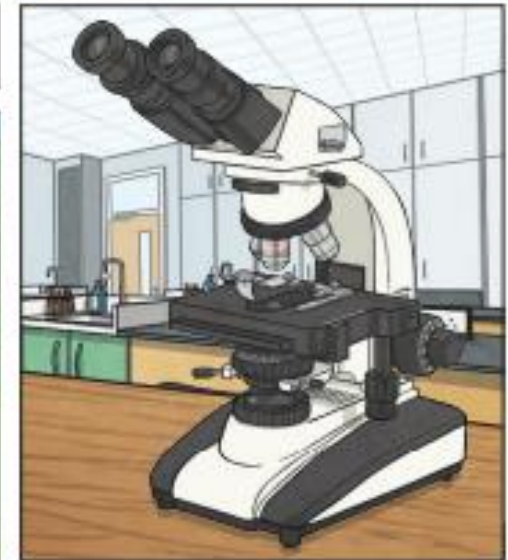
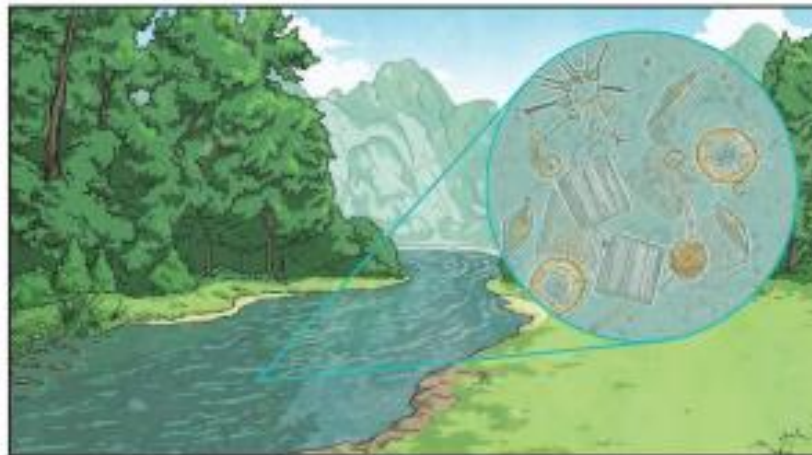
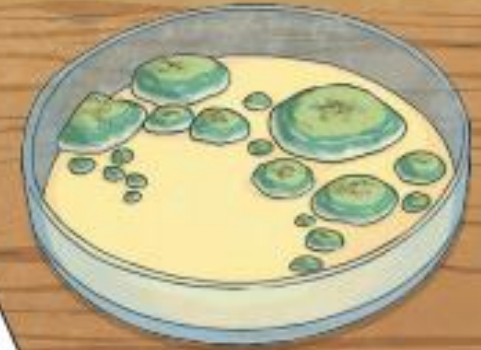
What reasons can we give for how living things are classified?

How can microorganisms be helpful/harmful?

## 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.



### 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

