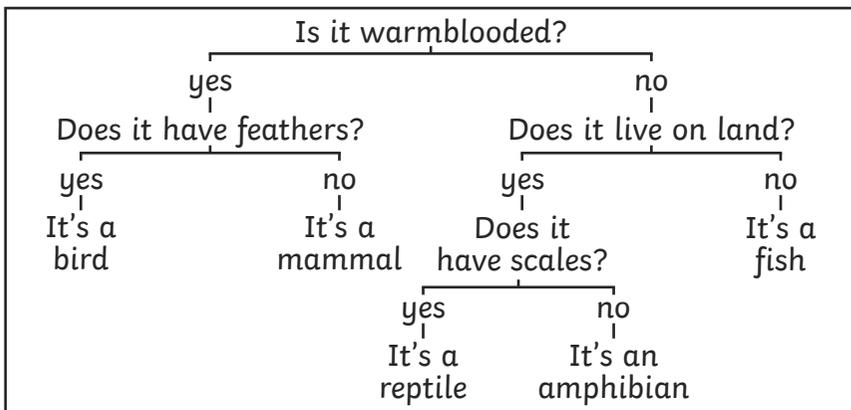


Key Vocabulary

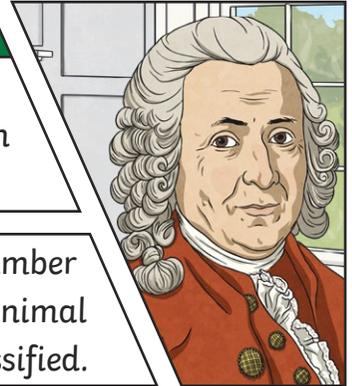
| | |
|------------------------|--|
| characteristics | Special qualities or appearances that make an individual or group of things different to others. |
| classify | To sort things into different groups. |
| taxonomist | A scientist who classifies different living things into categories. |
| key | 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

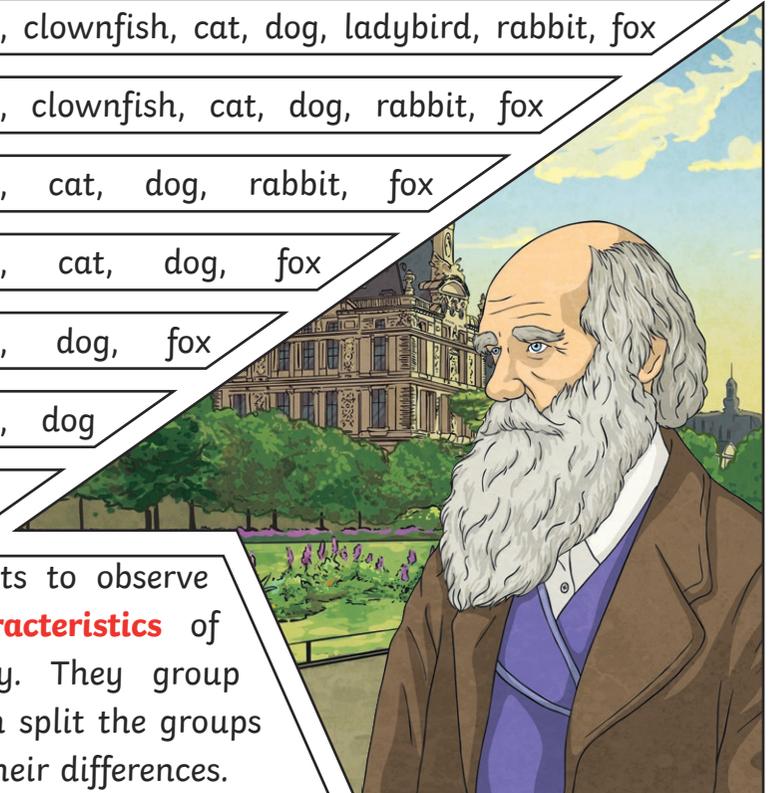
In 1735, Swedish Scientist Carl Linnaeus first published a system for **classifying** all living things. An adapted version of this system is still used today: The Linnaeus System.



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: 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.

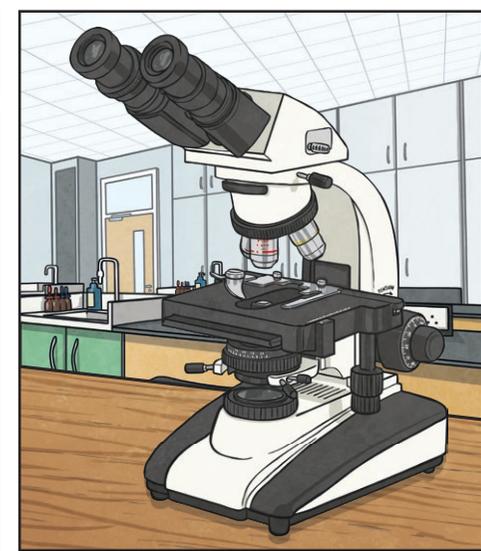
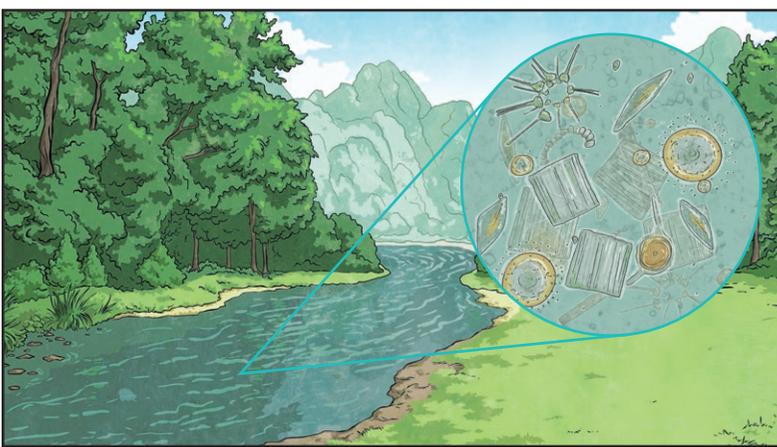
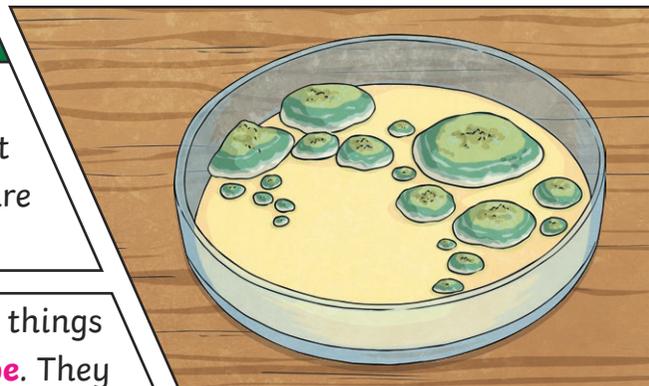


| Key Vocabulary | |
|----------------------|---|
| bacteria | A single-celled microorganism . |
| microorganism | An organism that can only be seen using a microscope , e.g. bacteria , mould and yeast. |
| microscope | A piece of equipment that is used to view very tiny (microscopic) things by magnifying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

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 | 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 |

