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Year 6 Science Knowledge Organiser Summer Term 2023

This term, in Science, we will sort animals into groups based on their similarities and differences; we will extend learning to find out about the standard system of classification first developed by Carl Linnaeus, choosing an animal and researching its classification. The children will have the opportunity to design their own 'curious creature' and classify it based on its characteristics. They will learn about micro-organisms and conduct an investigation into the growth of mould on bread.

Classification

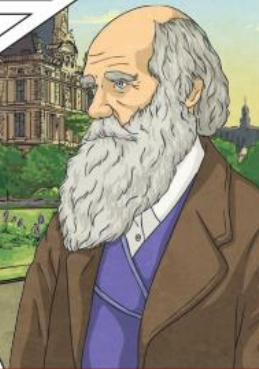
In 1735, Swedish Scientist Carl Linnaeus first published a system for **classifying** all living things. An adapted version of this system is still used today: The Linnaeus System.

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.



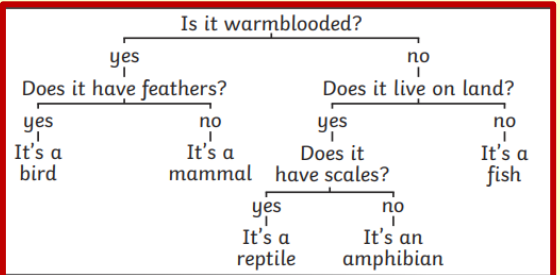
| | |
|--------------------------|---|
| Domain: Eukarya | jackal, clownfish, cat, dog, ladybird, daisy, rabbit, fox |
| Kingdom: Animalia | jackal, clownfish, cat, dog, ladybird, rabbit, fox |
| Phylum: Chordata | jackal, clownfish, cat, dog, rabbit, fox |
| Class: Mammalia | jackal, cat, dog, rabbit, fox |
| Order: Carnivora | 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

| | |
|------------------------|----------------------|
| Characteristics | Bacteria |
| Classify | Microorganism |
| Taxonomist | Microscope |
| Key | Species |



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 |