Science – Year 6 Spring 2

**Living things and their habitats**

Classifying plants and animals based on specific characteristics

(Previous knowledge – Year 5 – life cycles)

We will be learning more about how we sort and classify animals. We already know that animals can be grouped into different categories such as **mammals, birds**, **reptiles**, **amphibians**, and **fish**. We also know that some animals have a backbone (**vertebrates**) while others do not (**invertebrates**). Now, we will be learning about **Carl Linnaeus**, a scientist who created a system to sort and name all living things. We will explore how scientists **classify** animals in more detail using different levels, including **kingdom**, **class**, and **species**. We will also look at some fascinating animals that don't fit neatly into one category, such as the duck-billed platypus!

**How can living things be classified?** Living things can be classified by eight levels. The number of living things in each level gets smaller until the one animal is left in its species.

**Why do scientists classify living things?** Grouping living things allows scientists to observe and understand their characteristics more clearly.

**What is a taxonomist?**

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

**What is a microorganism?**

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

Microorganisms are very tiny living things that can only be seen using a microscope.

**Linnaean Classification System:** Linnaeus grouped living things into hierarchical categories based on their similarities. The system has seven levels:

**Kingdom –** The largest group (e.g., Animalia, Plantae).
**Phylum –** Groups organisms based on major body structures.
**Class –** Further divides phylum into groups (e.g., mammals, reptiles).
**Order –** Organisms with similar characteristics (e.g., primates, carnivores).
**Family –** Closely related organisms (e.g., cats, dogs, bears).
**Genus –** A group of species that share similar features.
**Species –** The most specific level; organisms that can breed together.

## Vocabulary

| Tier 1 | Tier 2 | Tier 3 |
|---|---|---|
| Characteristic | Insect | Taxonomist |
| Environment | Species | Bacteria |
| Key | Habitat | Microorganism |
| Mammal | Vertebrate | Subdivide |
| Amphibian | Invertebrate | Domain |
| Reptile | Classify | Genus |
| Characteristic | Insect | Taxonomist |
| Environment | Species | Bacteria |

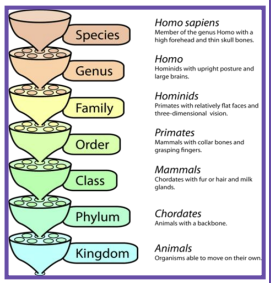
don't know

I know this word

I can use it in a sentence

**Key Scientist:**

**Carl Linnaeus (1707-1778)** was a Swedish scientist who developed a system for classifying living things. He is known as the 'Father of Taxonomy' because he created a way to categorise plants and animals that is still used today. His system, called binomial nomenclature, gives every species a two-part Latin name (e.g., Homo sapiens for humans).




Useful Resources

https://www.youtube.com/watch?v=p0bjT7HzIN8&ab_channel=ExplorePlanetEnglish