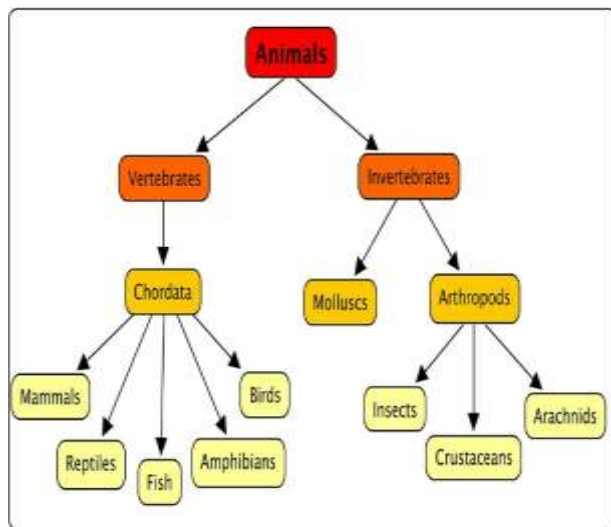# Year 6 Science- Biology- Classification

Prior Knowledge

You may already have heard of classification and be familiar with sorting things into groups by what they do and don't have in common.

Key Information

All humans are animals, specifically mammals.
All humans, animals and plants can be classified into specific categories.
It is important to be able to classify things in specific ways in order to make it easier and clearer to research, find out information and find similarities between living things.

Key Diagram

Key Vocabulary

Species – a group of animals that can reproduce to produce fertile offspring

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.

Classification – the sorting of things into different groups according to their similarities and differences

Taxonomist – a scientist who classifies different living things into categories

Habitat – The natural home or environment of an animal, plant or other organism

Mammal – A warm-blooded vertebrate animal, distinguishable by the posession of hair or fur, females secreting milk for young and typically giving birth to live young

Microorganism – A microscopic organism, especially a bacteria, virus or fungus

Environment –The surroundings or conditions in which a person, animal, or plant lives

Characteristics - Special qualities or appearances that make an individual or group of things different to others.

Knowledge and Understanding

 Scientists believe that there could be as many as 10 million different species on Earth! Scientists sort and group living things according to their similarities and differences.

 Carolus Linnaeus is the father of taxonomy, which is the system of classifying and naming organisms. One of his contributions was the development of a hierarchical system of classification of nature. This system includes eight taxa: domain, kingdom, phylum, class, order, family, genus, and species.

All plants are included in one Kingdom (Plantae) which is then broken down into smaller and smaller divisions based on several characteristics.

Animals can be divided into invertebrates and vertebrates. We will consider the other three groups: fungus, monera (microbes) and single-celled organisms called protists. Each time we divide up the living things by particular characteristics, the groups become smaller until we end up with the organism being 'identified'.

What questions can you use to structure your classification?
- Can you make a set of identification cards to help other children classify and identify plants and animals in the school grounds or local environment?
- How did Linnaeus's work help scientists who were arguing and could not decide the best way to classify living things?
- Why are bacteria sometimes good and sometimes bad?