Science - Year 6 - How do we classify plants and animals?

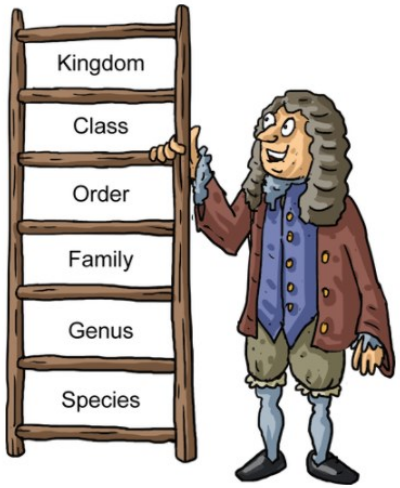
The Rivers C of E Academy Trust

Glossary:

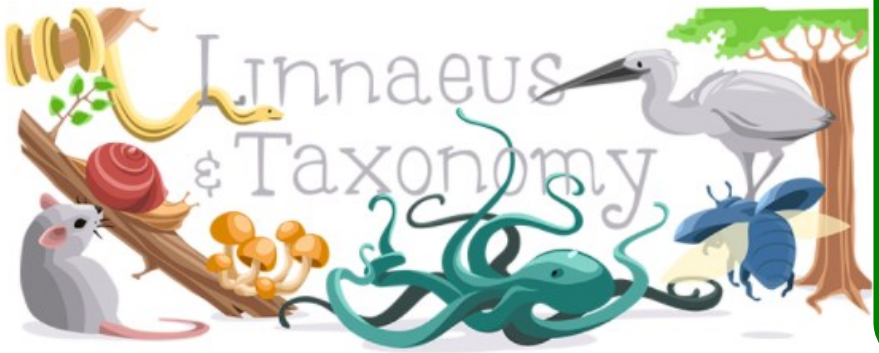
- Invertebrate—an animal lacking a backbone
- Vertebrate—animal with a backbone
- Mammals—humans and all other warm blooded vertebrates. They feed their young with milk and have a more developed brain.
- Reptiles—cold blooded, which means they rely on heat from their surroundings to warm up.
- Amphibians—small vertebrates that need water, or a moist environment to survive.
- Fish—an animals that lives in water and has fins for swimming and gills for breathing
- Insects—creatures that have bodies in three segments that are protected by a hard shell
- Bacteria—small organisms, or living things, that can be found in all natural environments. They are made of a single cell.
- Fungi—A group of living organisms which are classified in their own kingdom. They are not animals, plants or bacteria.
- Microorganisms—living things that are too small to be seen with the naked eye.
- Mould—an often fuzzy surface growth of fungus on damp or decaying material.

Carl Linnaeus is most famous for **creating a system of naming plants and animals**—a system we still use today. This system is known as the binomial system, whereby each species of plant and animal is given a genus name followed by a specific name (species), with both names being in Latin.

Animal species can we identified through a variety of sub sections. Animal kingdom is first established, then ordered by phylum, class, order, family, genus and finally species.



Scottish bacteriologist Alexander Fleming is **best known for his discovery of penicillin in 1928, which started the antibiotic revolution**. For his discovery of penicillin, he was awarded a share of the 1945 Nobel Prize for Physiology or Medicine.



Sticky Knowledge:

- To know that there are different kingdoms for animals, plants and microorganisms
- To know the animal classes are mammals, reptiles, amphibians, fish and insects
- To know that animals can be cold or warm blooded and this factor usually determines their habitat.
- To know how to use a classification key created by Carl Linnaeus and give examples of each class.
- To know that plants can make seeds and not make seeds
- To know how living things are classified using the Linnaean system and how to use this system.
- To know that a virus is not a microorganism
- To know that some microorganisms are harmful and some are helpful
- To know how to conduct a fair test to answer a scientific question
- To know that Alexander Fleming discovered penicillin
- To know that penicillin took many years to produce
- To know that penicillin was discovered by accident due to mould growing