Year 6 – Living things and their Habitats - Classification

Key vocabulary

classification	A system used to group animals and plants and allow them to be identified and compared. The names are given in Latin and are understood all over the world.	**characteristics**	Special qualities or appearances that make an individual or group of things different to others.
organism	Anything that is alive	**taxonomist**	A scientist who classifies different living things into categories.
vertebrate	an animal distinguished by a backbone or spinal column	**microorganisms**	A very tiny living thing that can only be seen through a microscope. They can be found in and on our bodies, in the air, in water and on objects around us.
invertebrate	an animal that does not have a backbone or spinal column, they have their skeleton outside their body (an exoskeleton)	**bacteria**	A single-celled microorganism. Some have great benefits, but some can be harmful.

The Classification system

Domain

Kingdom

Phylum

Class

Order

Family

Genus

Species

Domain: there are three domains – plants and animals belong to the **eukaryote** domain.

Kingdom: The six kingdoms include animal, plant, fungi and bacteria.

Phylum: There are more than 30 phyla in the animal kingdom. **Phylum chordata** includes all vertebrates.

Class: Each phyla is divided into classes. Classes in phylum chordata include mammals, fish and birds.

Order: A smaller group within class

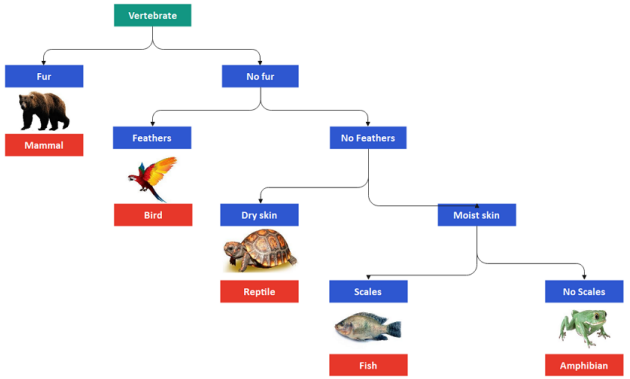
Family: A smaller group within order

Genus: Includes species that are very closely related and share unique body structures.

Species: A group of animals that can reproduce to produce fertile offspring.

Classification key

A series of questions that determine an organism's physical characteristics. It is structured as a flow chart of **yes** and **no** questions.
It is used to categorise a selection of plants or animals **or** to identify a plant or animal.



Key people

Carl Linnaeus 1707 - 1778	A Swedish scientist who invented the classification system in 1735.

Animal Classes

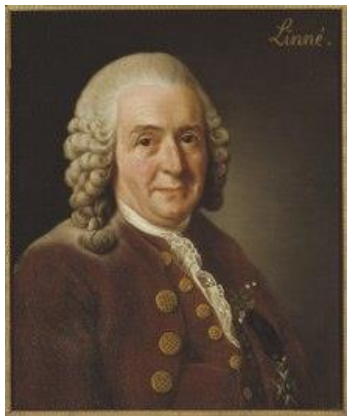
<u>Phylum chorata</u> – <u>vertebrates:</u>

Mammal: warm-blooded, has fur, gives birth to live young, feeds babies with milk

Birds: warm-blooded, feathers, beaks (no teeth), lays eggs

Reptiles: cold-blooded, dry, scaly skin, lays eggs

Amphibians: cold-blooded, live in water and on land, undergo metamorphosis, lays eggs



Fish: cold-blooded, breathe through gills under water, lays eggs

<u>Phylum arthropoda</u> – <u>jointed legs and exoskeleton</u>

Insects: six jointed legs, pair of antenna, three body parts, lays eggs

Arachnid (spiders): eight jointed legs, two body parts, produces silk, lays eggs