Living things and their Habitats

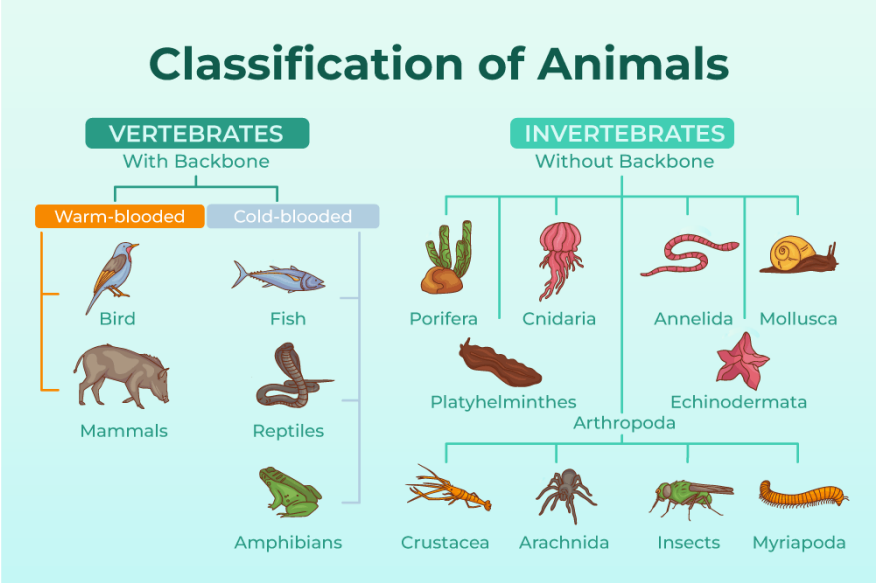
Classification

Animals can be divided into groups or 'classified' by looking at the similarities and differences between them.

Animals are divided into two main groups. Animals that have a backbone are called vertebrates. Animals that don't have a backbone are called invertebrates.

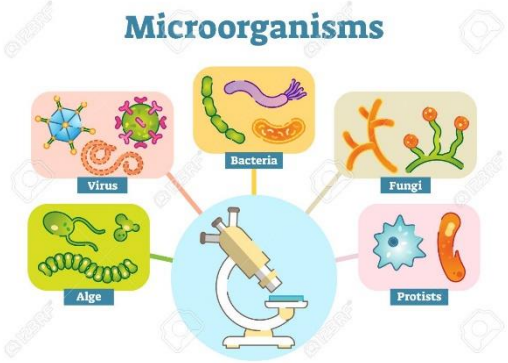
Vertebrates and invertebrates are divided into smaller groups. Vertebrates, for example, are divided into fish, amphibians, reptiles, birds and mammals.

There are many different groups of invertebrates too. They include invertebrates which have soft bodies such as jellyfish, worms and molluscs (like slugs and squids). There are also groups of invertebrates with hard bodies, such as insects, crustaceans and spiders.



Micro-organisms

Microorganisms are tiny. They are so small they can only be seen with a microscope. Yeast is a helpful microorganism which makes bread rise. Bacteria is a microorganism which breaks down plants into nutrients. Microorganisms are also known as 'germs'. Harmful germs can make us unwell. Good hygiene will avoid spreading these germs. Use soap and hot water to wash your hands after preparing food or using the toilet. This will kill bacteria.



Plants

Botanists (scientists who study plants) have lots of ways of classifying plants to help identify them. Just like animals, there are ways you can sort them into broad groups and ways you can sort them into more specific groups.

Key Vocabulary

Classification	The arrangement of animals and plants into groups.
Vertebrates	A group of animals that have a backbone or spinal column.
Invertebrates	An animal lacking a backbone.
Micro-organisms	A simple life form that can only be viewed through a microscope.
Amphibians	A cold-blooded vertebrate that spends some time on land but must breed and develop into an adult in water.
Mammals	Animals that are warm-blooded vertebrates with hair. They feed their young with milk and have a more well-developed brain than other types of animals.
Fish	Vertebrates that live in water.
Reptile	An air-breathing animal that has scales instead of hair or feathers
Plants	Living things that grow from the soil and turn light from the Sun into food.
Animals	Living things that need food and water to live. Animals can sense what goes on around them. Their bodies allow them to move in reaction to their surroundings.
Environment	All the physical surroundings on Earth are called the environment. The environment includes everything living and everything non-living.
Habitat	The home of an animal or a plant.

Carl Linnaeus

Scientists today place all life in neat categories with sensible names that do not change. A few hundred years ago, though, scientists gave plants and animals long Latin names and often changed those names at will. Carl Linnaeus changed that when he developed an organised system that is still used today. Carolus Linnaeus was a Swedish naturalist. He created two scientific systems: the system for classifying plants and animals and the system for naming all living things. Linnaeus is also called the Father of Systematic Botany. Botany is the study of plants.