Science Knowledge Organiser: Living Things & Their Habitats

Working scientifically:

- I can record findings using more complex scientific language, drawings, labelled diagrams, keys, bar charts and tables.
- I can report on findings from enquiries including oral and written explanations, displays or presentations of results and conclusions.

Key Vocabulary

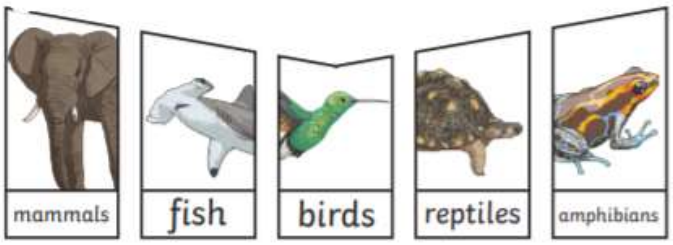
Life Processes	These are the 7 processes all living things need to do in order to stay alive.
Characteristics	Distinguishing features or qualities that are specific to a species.
Classification	When animals, or plants, are placed into groups according to their similarities.
Classification Key	Used to identify, name and group a variety of living things.
Vertebrates	Animals with a backbone.
Invertebrates	Animals without a backbone.
Habitat	The specific area or place in which particular animals or plants live.
Hibernation	The way in which some animals deal with the harshness of winter.
Migrate	When animals travel from one habitat to another in search of food, better conditions or reproductive needs.
Environment	All the physical surroundings on Earth are called the environment.
Human impact	Changes to environments and ecosystems caused by humans.
Extinct	When there are no more of a particular species alive.
Food chain	A food chain shows how each living thing gets its food and energy.

In order to stay alive and healthy, all living things need certain conditions that let them carry out the seven life processes. We can use the acronym **Mrs Gren** to help us remember what these are.

Animals can be classified into different groups depending upon their characteristics.

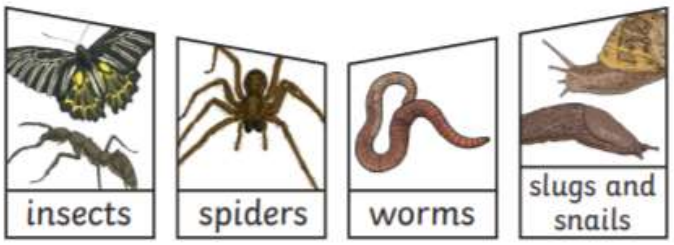
Vertebrates

Vertebrates can be separated into 5 broad groups shown below.

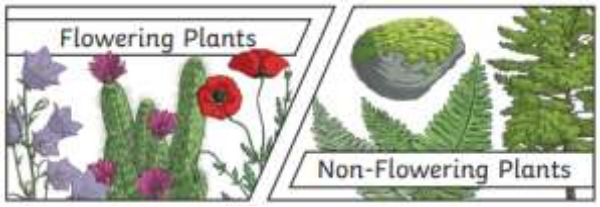


Invertebrates

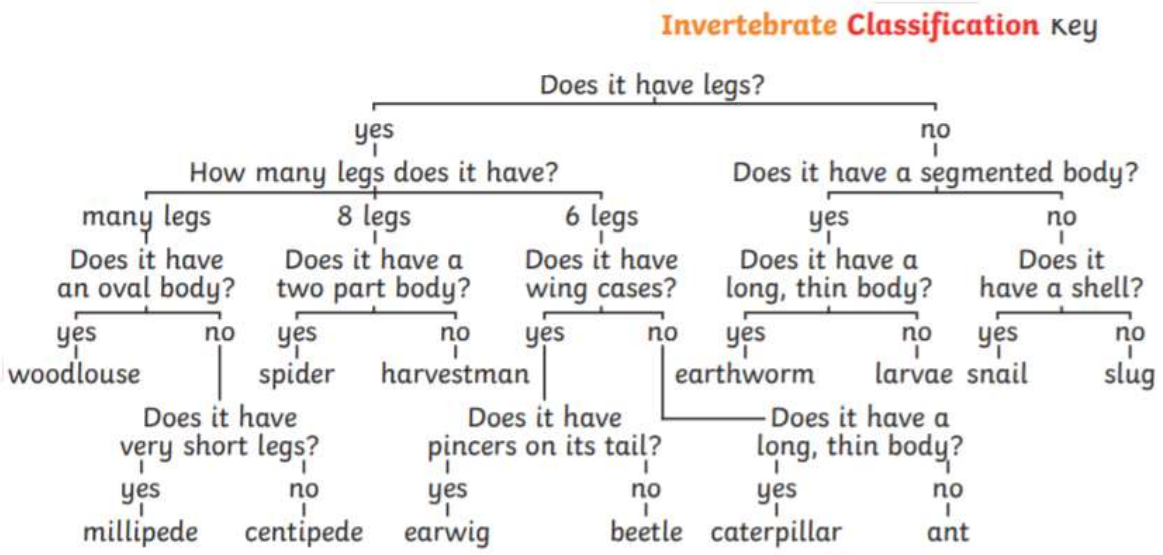
The 4 invertebrate groups are shown below.



Plants and animals rely on the environment to give them everything they need. Therefore, when habitats change, it can be very dangerous for the plants and animals that live there. Don't forget, plants can be classified too!



You can use classification to help group, identify and name a variety of living things.



Changes to an environment can be natural or caused by humans and can have positive as well as negative effects. Here are some of examples of things than can change the environment.

Natural

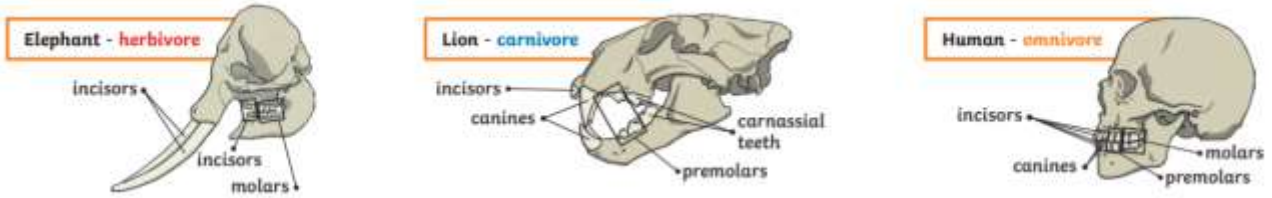
- Earthquakes
- Storms
- Floods
- Droughts
- Wildfires
- The seasons

Man-Made

- Deforestation
- Urbanisation
- Pollution
- The introduction of a new animal or species into an environment
- Nature reserves

Food Chains

The teeth of an animal are designed to eat different foods depending on the diet of the animal. Examples of a herbivore, a carnivore and an omnivore skull:



An Example of a Food Chain

The arrows in a food chain show the flow of energy.