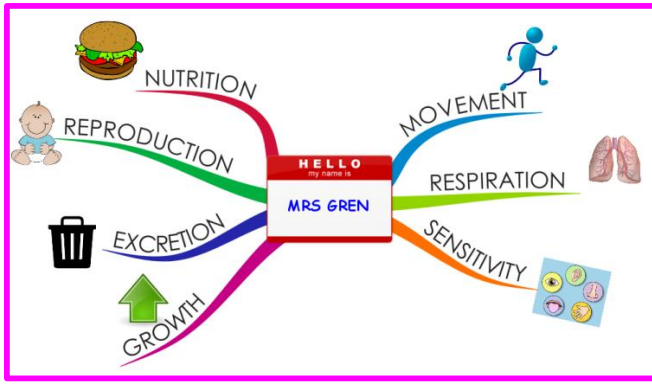
SCIENCE: Living Things and their habitats | Summer A | Year 4

Key Ideas

Living Thing / Organism	An individual form of life



To stay alive and healthy, all living things need certain conditions that let them carry ot the seven **life processes.**

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

Natural

- earthquakes
- Storms
- Floods
- Droughts
- Wildfires
- The seasons

Human-Made

- Deforestation
- Pollution
- Urbanisation
- The introduction of new animal or plant species to an environment
- Creating new nature reserves.

Plants and animals rely on the environment to give them everything they need. Therefore, when habitats change , it can be very dangerous to the plants and animals that live there.

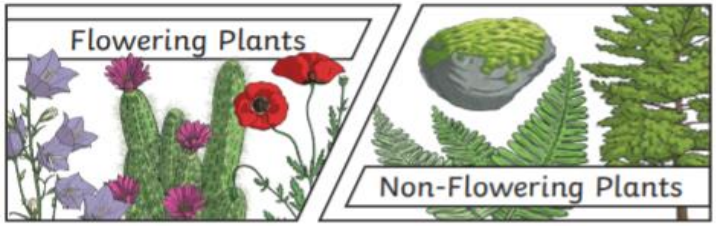
Key words	Explanation
life processes	The things living things do to stay alive.
respiration	A process where plants and animals use oxygen to help turn their food into energy.
sensitivity	The way living things react to changes in their environment.
reproduction	The process through young are produced.
excretion	The process by which living things get rid of waste.
nutrition	The process of obtaining food to provide living things with energy to live and stay healthy.
habitat	The specific area or place in which particular animals or plants may live.
environment	An environment contains many habitats an these include areas where there are both living anf nonliving things.
endangered species	A plant or animal where there are not many of their species lefts and scientists are concerned that the species may become extinct.
extinct	When a species has no more members alive on the planet.

Key Questions

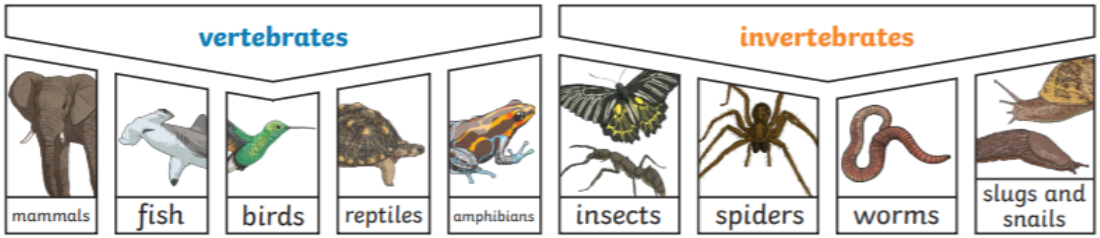
- If a habitat is polluted what effects could it have on the animals and plants?
- What could you do to look after a habitat?
- How could we group or classify plants?

Key words	Explanation
classification	Plants or animals are placed into groups according to their similarities.
vertebrates	Animals with a backbone
invertebrates	Animals without a backbone.
specimen	A particular plant or animal that scientists study to find out about its species.
characteristics	The distinguishing features or qualities that are specific to a species.

Plants can be sorted into many different groups. For example:



Animals can be grouped in lots of different ways based upon their **characteristics**.

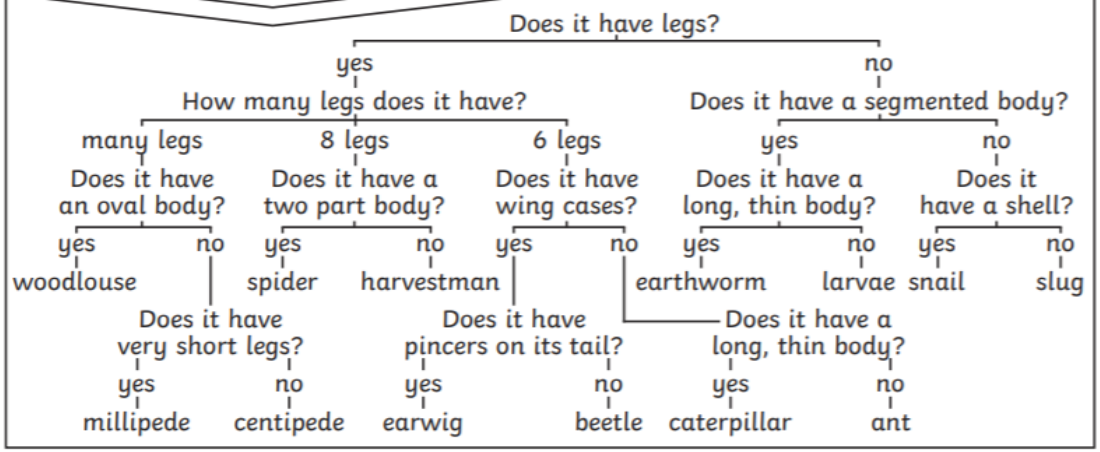


Vertebrates can be separated into five broad groups.

You could sort **invertebrates** you might see around school in different ways, such as in this example. The vast majority of living things on the planet are **invertebrates**.

You can use **classification** keys to help group, identify and name a variety of living things. Here is an example of a **classification** key:

Invertebrate Classification Key



Key Figures

Carl Linnaeus (1707-1778)		Carl Linnaeus is credited with organising and naming living things. He created the hierarchy for identifying, naming and classifying living organisms.
Charles H. Turner (1867 -)1923		Charles H.Turner was a behavioural scientist whose research focused on animal behaviour. He is most famous for his discovery that insects can hear. Through his research, he also found that honeybees could recognise colours and patterns and have some idea of time.
Sylvia Earle 1935 - still alive		Sylvia Earle is an oceanographer and explorer known for her research on marine life and raising awareness of the threats that overfishing and pollution pose to the world's oceans. In 1998 she was named by Timed Magazine as its first Hero for the Planet.