

Key Learning

Describe features of plants and animal and compare similarities and differences between sub-groups, recognising that all living things can be grouped in different ways.

Explore and use classification keys to help to group, identify and name a variety of living things in the local and wider environment.

Recognise that environments can change and that this can pose dangers to living things.

Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.

Use keys based on external features to help identify and group living things systematically.

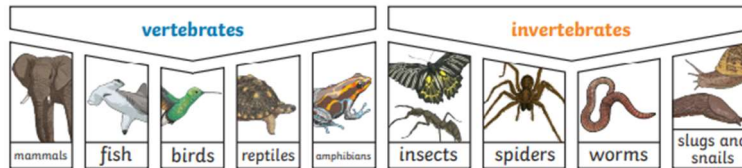
Year 4/5 Science: Living things and their habitats



Morda CE Primary School

Key Knowledge

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

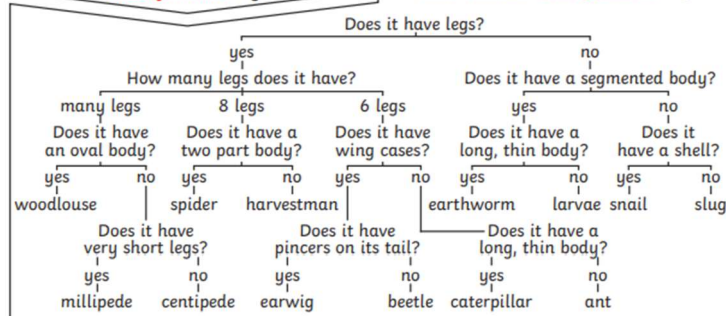


Vertebrates can be separated into five broad groups.

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

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**.

Invertebrate Classification Key



Life Processes

To stay alive and healthy, all living things need certain conditions that let them carry out the seven

life processes:

Movement
Respiration
Sensitivity
Growth
Reproduction
Excretion
Nutrition

Key Scientific Vocabulary

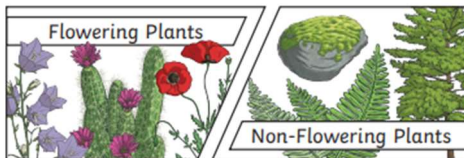
Key Vocabulary	
organisms	This is another word that can be used to mean 'living things'.
life processes	The things living things do to stay alive.
respiration	A process where plants and animals use oxygen gas from the air to help turn their food into energy.
sensitivity	The way living things react to changes in their environment .
reproduction	The process through which young are produced.
excretion	The process by which living things get rid of waste products.
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 and these include areas where there are both living and non-living things.
endangered species	A plant or animal where there are not many of their species left and scientists are concerned that the species may become extinct .
extinct	When a species has no more members alive on the planet, it is extinct .

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 an **environment**.

- | | |
|--|--|
| Natural <ul style="list-style-type: none"> • earthquakes • storms • floods • droughts • wildfires • the seasons | Human-Made <ul style="list-style-type: none"> • 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.

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



Investigation Questions

What affects habitats?

Common Misconceptions

Whales, jellyfish, and starfish are all fish.

Varying the population size of a species may not affect an ecosystem because some organisms are not important.

Key Vocabulary

classification	This is where 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.