



Living things and their habitats

Key vocabulary	
vertebrate	Animals that have a backbone. They can be divided into 5 groups: fish, amphibians, reptiles, birds and mammals.
fish	<ul style="list-style-type: none"> - cold-blooded - scales covering its body - has fins - lives in water, lays eggs in water - breathes through gills
amphibian	<ul style="list-style-type: none"> - cold-blooded - start as eggs in water and breathe through gills - later develop lungs and live on land and in water - lays eggs in water - damp skin/body
reptile	<ul style="list-style-type: none"> - cold-blooded - breathes with lungs - dry, scaly skin - lay soft-shelled eggs on land
bird	<ul style="list-style-type: none"> - warm-blooded - breathes with lungs - lays eggs with hard shells - covered with feathers - have wings but not all can fly
mammal	<ul style="list-style-type: none"> - warm-blooded - have fur or hairy skin - give birth to live young - feed their young milk
invertebrate	Animals that do not have a backbone. Can be divided into several groups including insects, spiders, snails and worms.
plants	Can make their own food. They can be divided broadly into two main groups: flowering plants and non-flowering plants.

Humans develop inside their mothers and are dependent on their parents for many years until they are old enough to look after themselves.



Amphibians such as frogs are laid in eggs then, once hatched, go through many changes until they become an adult.



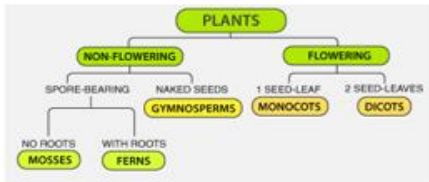
Some animals, such as butterflies, go through **metamorphosis** to become an adult.



Birds are hatched from eggs and are looked after by their parents until they are able to live independently.

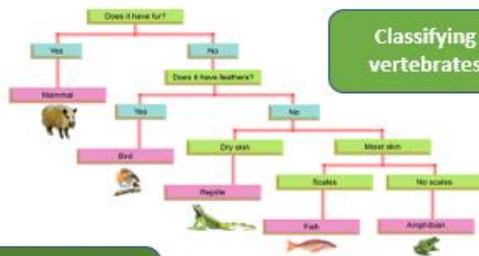


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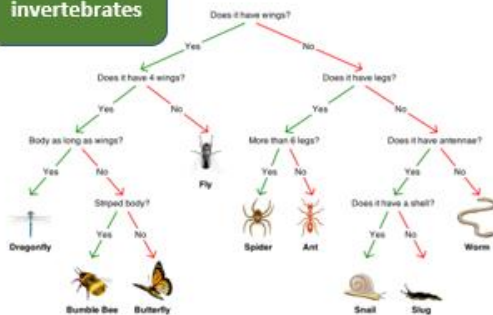


Flowering plants – numerous and diverse group. Reproduce through flowers and seeds. E.g. sunflower

Non-flowering plants – smaller group. They have a simple structure and do not have flowers or seeds. They reproduce through spores. E.g. algae, mosses



Classifying invertebrates



Significant scientists

Carl Linnaeus
(1707-1778)



Carl Linnaeus was a Swedish scientist who developed the modern system of classifying and naming organisms. Before this the names of living things were often very long. He gave them a two-part name.

Chris Nelson



Chris Nelson is a horticulturist and a director of Growing Underground which uses hydroponic techniques to grow pesticide-free crops in a former London underground air-raid shelter.

Classification

Living things can be classified into broad groups according to observable characteristics that are similar or different.

Micro-organisms

These are tiny living creatures. Most can only be seen through a microscope. They can be sub-divided into smaller groups including **bacteria**, **fungi** and **viruses**.

By the end of this unit you will be able to :

- describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals
- give reasons for classifying plants and animals based on specific characteristics.