Knowledge Organiser

Classification and Environments

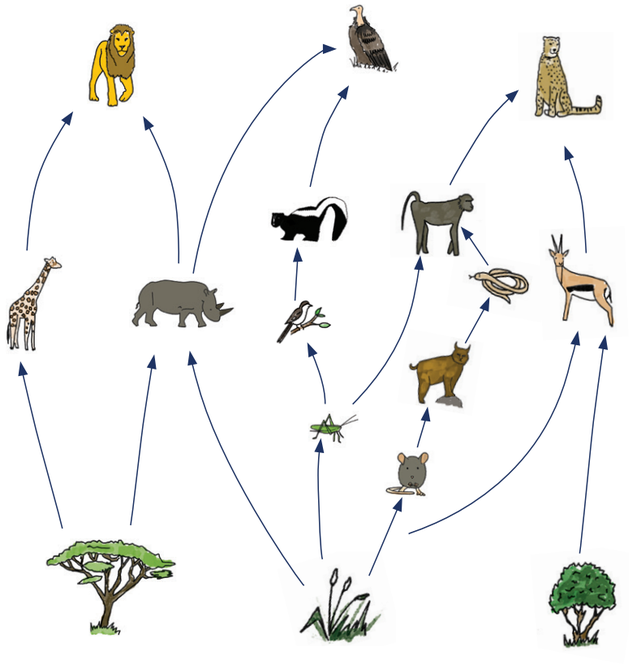
Where do organisms live?

A habitat is the natural home of a plant or animal (organism) and this can be in water or on land. An organism is suited to live in its own habitat. Together, the plants and animals within a habitat form an ecosystem.

Within an ecosystem or habitat, the organisms will be connected and linked together in a food chain or food web. A food chain always begins with a green plant known as the producer. The remainder of the food chain shows which animal eats the producer and which animal eats that animal, etc. An animal which eats something else is called a consumer. A food web shows how different food chains are linked together.

An animal which only eats plants is called a herbivore, an animal which only eats other animals is called a carnivore and an animal which eats both is known as an omnivore.

Food Web



What is a vertebrate?

A vertebrate is an animal with a backbone — a long column of bones which supports the body. Vertebrate can be split into 5 groups, each with different characteristics. These groups are mammals, fish, birds, reptiles and amphibians.


mammals


fish

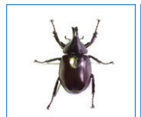

birds


reptiles


amphibians

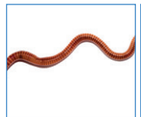
What is an invertebrate?

An invertebrate is an animal without backbone. The animals have soft bodies and sometimes have a hard outer shell to protect them. They can be split into 7 groups. These groups are insects, annelids, molluscs, protozoa, arachnids, crustaceans and echinoderms.


insects

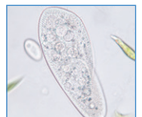

crustaceans


echinoderm


annelids


arachnids


molluscs


protozoans

Glossary

1	habitat	the natural home of a plant or animal
2	ecosystem	the living things and links between them in an area
3	organism	a living thing (plants or animals)
4	food chain	living things which need each other for nutrition
5	food web	many food chains and the connections between them
6	producer	the green plant at the beginning of every food chain
7	consumer	something which eats a producer or another consumer
8	carnivore	an animal which only eats other animals
9	herbivore	an animal which only eats plants
10	omnivore	an animal which eats both animals and plants
11	vertebrate	an animal with a backbone
12	invertebrate	an animals without a backbone
13	species	a set of animals or plants with similar characteristics
14	classification	a group that an animal or plant can be sorted into
15	environment	the air, land and water in which organisms live
16	impact	having an effect on something
17	pollution	damage caused to water, air or land by waste
18	deforestation	the cutting down of trees or destruction of forests
19	urbanisation	turning land into cities
20	protect	to look after something and avoid harm

How can environments change?

An environment can change naturally but will often change because of something that humans do. A volcano erupting is a natural change but deforestation is a human change. Climate change is natural but is also due to the actions of humans. Any change will impact the ecosystem, the habitats and the organisms living in an area.

Changes can be positive or negative. Negative changes are due to things like deforestation, littering, urbanisation and pollution. Humans can make positive changes by recycling, protecting habitats with nature reserves or by creating new spaces for organisms to live in.

How can we group plants?

Plants can be split into two main groups: flowering plants and non-flowering plants. Flowering plants include grasses and are plants which produce flowers and fruits.

Non-flowering plants do not produce flowers and fruits. There are three main types and these are: ferns, conifers and mosses.