

# Habitats

## What is a habitat?

A habitat is a place where plants and animals live. There are many different habitats on Earth, including:



forest



polar



desert



ocean



mountain



rainforest

Every habitat provides the things that plants and animals need to survive:

- **food** to provide nutrients for energy and growth
- **water** for plants to make food and stand upright and for animals to stay alive
- **shelter** for protection from weather and predators
- **space** to grow, feed and have offspring

## Living and non-living things

Habitats contain living things, such as plants and animals, and non-living things, such as dead plants and animals, rocks and water. Living things can be identified because they carry out the seven life processes:

- moving
- breathing
- using their senses
- feeding
- getting rid of waste
- producing offspring
- growing

## Identifying plants and animals

Many different plants and animals live in a habitat. Unknown plants and animals can be identified using spotting sheets. Observations of their physical features and behaviour can be compared with pictures and descriptions of plants and animals on the spotting sheet to find a match.

## Food chains

A food chain shows how energy from food is transferred from plants to animals in a habitat. The arrow between members of a food chain means 'is eaten by'. Food chains start with a plant because plants make their own food using sunlight. Plants are eaten by animals, some of which are eaten by other animals. Predators are animals that eat other animals. Prey are animals that are eaten.



grass (producer)

is eaten by



water vole (herbivore)

is eaten by



stoat (carnivore)

In this food chain, the grass is a producer because it makes its own food from sunlight. It is eaten by the water vole, a herbivore, which is eaten by the stoat, a carnivore. The stoat is the predator, and the water vole is its prey.

## Woodland habitat

Woodland habitats are green, damp and shady. They contain living things, such as oak trees and squirrels, and non-living things, such as rocks and streams. Woodland habitats provide everything needed for its living things to survive and grow.



# Animal adaptations

Prey animals use different ways to avoid being eaten by predators.

## Speed

Some prey, such as the springbok, use speed to outrun predators.



## Weapons

Some prey, such as the porcupine, use body parts, such as sharp quills, to hurt their predators.



## Warning colouration

Some prey use bright colours to warn predators to stay away.



## Shields

Some prey have hard coverings for protection.



## Mimicry

Some prey look like other, more dangerous animals.



## Camouflage

Some prey blend into their surroundings so that predators will not see them.



# Plant adaptations

Plants also have adaptations that protect them from being eaten by animals.

## Spines

Some plants grow sharp spines to hurt predators.



## Thorns

Woody thorns can scratch and pierce the skin of predators.



## Hairs

Tiny hairs on the stems and leaves of some plants stop insects from crawling on them.



## Prickly leaves

Sharp prickles can put animals off eating the leaves.



## Stings

Painful stings can stop animals from eating some plants.



## Chemicals

Some plants produce chemicals that are poisonous to animals.



## Camouflage

Some plants are camouflaged so that they do not look like food.



## Sheltering animals

Some plants provide a home to other animals that provides them with protection.



# Glossary

- camouflage** The ability to hide or blend in with the surrounding habitat.
- identify** To recognise something and say what that thing is.
- mimicry** When a living thing copies the appearance or behaviour of another animal, plant or object.
- nutrient** A substance that plants and animals need to grow, live and stay healthy.
- offspring** The young of an animal or plant.
- quill** A long, sharp spine found on some animals, such as porcupines.

