



Y4 Science Knowledge Organiser—Living Things and their Habitats



Key Knowledge

Learn these key facts—key points in red

Key previous learning (see vocab for definitions)

herbivore/carnivore/omnivore

vertebrate/invertebrate

mammals/birds/fish/amphibians/reptiles

How can living things be grouped?

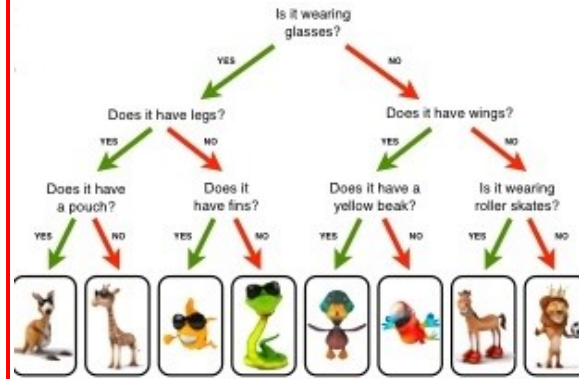
All living things, which can also be called organisms, have to do certain things to stay alive. these are the life processes:



Living things can be grouped according to different criteria—where they live, what type of organism they are, what features they have. E.g., a camel can belong in a group of vertebrates, a group of animals that live in the desert, and a group of animals with four legs.

What is a classification key?

A classification key is a tool that uses yes/no questions to group living things by different criteria.



How can environments change?

Habitats can change throughout the year and this can have an effect on the plants and animals living there. Humans can have positive effects on the environment, e.g. nature reserves, but instead often damage it.

People-made Threats to the Environment

Air-pollution from cars, e.g. carbon monoxide, and the burning of fossil fuels.

Water pollution through industrial waste and farm fertilisers that can pollute rivers and streams.



Rubbish—Plastic and household waste ends up on the streets, in the sea or in rubbish dumps, destroying habitats and wildlife.

Key Vocabulary

Understand these key words

Word	Definition
amphibian	a cold-blooded vertebrate that can live in water and on land.
biomes	a natural area of vegetation and animals .
bird	warm-blooded vertebrates with feathers, pointed beaks and wings.
carnivore	an animal that eats meat.
classification key	a system which divides things into groups or types.
criteria	a factor on which something is judged.
environment	all the physical surroundings on Earth including everything living and non-living.
excretion	the process of eliminating waste from the body.
fish	cold-blooded (mainly) vertebrates that can only live in water.
habitat	the natural environment in which an animal or plant lives or grows.
herbivore	an animal that only eats plants.
invertebrate	creature that does not have a spine.
life processes	the seven processes that tell us that living things are alive.
mammal	a warm-blooded vertebrate that breaths air and grows hair.
microhabitat	a small part of the environment that supports a habitat.
nutrition	the process of taking food into the body and absorbing nutrients.
omnivore	person or animal that eats both meat and plants.
organism	a living thing.
reproduction	when an animal or plant produces one or more copies of itself.
reptile	cold-blooded vertebrates.
respiration	process of respiring; breathing ; inhaling and exhaling air.
sensitivity	responding to the external environment.
vegetation	plants, trees and flowers.
vertebrate	a creature which has a spine.

Focus Scientists — Carl Linnaeus

Carl Linnaeus (1707-1778) was a botanist, zoologist and physician. He's most famous for simplifying the naming system scientists use to describe the millions of species on Earth.



Rachel Carson

Rachel Carson (1907-1964) was a marine biologist. She was most famous for her book Silent Spring (1962) which warned of the damage humans were doing to the environment and led to the modern environmental movement.

