

Willerby Carr Lane Primary School - Science

Topic: Living Things and their Habitats

Year: 4

Strand: Biology

What should I already know?

- Animals can be grouped into vertebrates (and then further into fish, reptiles, amphibians, birds and mammals) and invertebrates.
- Animals can be grouped into carnivores, herbivores and omnivores
- The names of some common wild and garden plants and deciduous and evergreen trees.
- Examples of habitats (including microhabitats) and the animals and plants that can be found there.
- Living things depend on each other to survive.
- How food chains and food webs work.

- negative effects: litter, urban development

What will I know by the end of the unit?

How can living things be grouped?

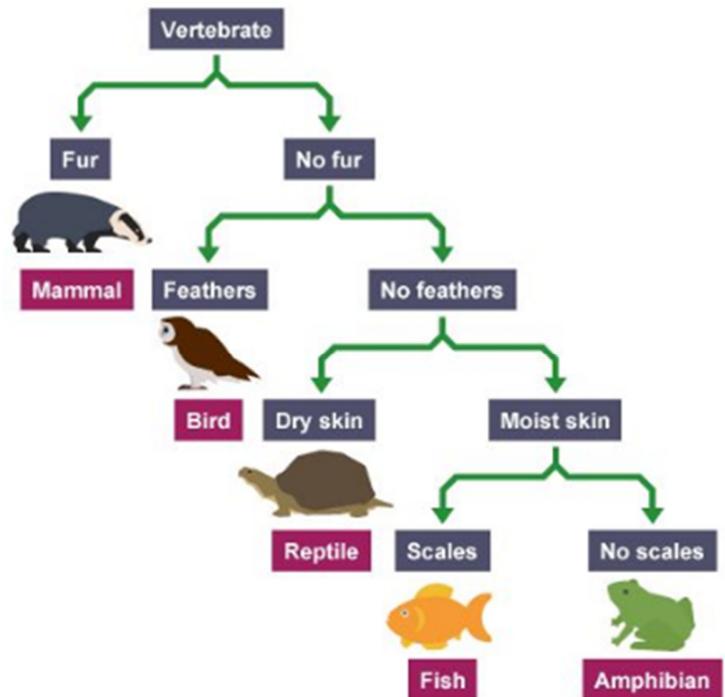
- All living things, which can also be called organisms, have to do certain things to stay alive. These are the life 7 processes:
 - movement
 - respiration
 - sensitivity
 - growth
 - reproduction
 - excretion
 - nutrition
- Living things can be grouped according to different criteria (where they live, what type of organism they are, what features they have). For example, a camel can belong in a group of vertebrates, a group of animals that live in the desert, and a group of animals that have four legs.

What is a classification key?

- A classification key is a tool that is used to group living things to help us identify them

How can habitats change?

- Habitats can change throughout the year and this can have an effect on the plants and animals that live there.
- Humans can have positive and negative effects on the environment:
- positive effects: nature reserves, ecological parks



Vocabulary	
biomes	a natural area of vegetation and animals.
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
deciduous	trees that lose leaves in the autumn every year
environment	all the circumstances, people, things, and events around them that influence their life
evergreen	a tree or bush which has green leaves all the year round
excretion	the process of eliminating waste from the body.
food chain	a series of living things which are linked to each other because each thing feeds on the one next to it in the series.
habitat	the natural environment in which an animal or plant normally lives or grows herbivore an animal that only eats plants.

invertebrate	a creature that does not have a spine, for example an insect, a worm, or an octopus.
life processes	there are seven processes that tell us that living things are alive
microhabitat	a small part of the environment that supports a habitat, such as a fallen log in a forest.
minibeast	a small invertebrate animal such as an insect or spider.
nutrition	the process of taking food into the body and absorbing the nutrients in those foods.
omnivore	person or animal eats all kinds of food, including both meat and plants.
organism	a living thing.
reproduction	when an animal or plant produces one or more individuals similar to itself.
respiration	process of respiring; breathing; inhaling and exhaling air.
sensitivity	responding to the external environment urban belonging to, or relating to, a town or city.
vegetation	plants, trees and flowers.
vertebrate	a creature which has a spine.

Investigate!

- Complete Venn diagrams to show if living things can be grouped into two or more groups.
- Use criteria to sort living things in a Carroll diagram
- Sort vertebrate and invertebrate animals into groups, describing their key features. Use a classification key to identify which group of vertebrates animals belong to and then create your own.
- Carefully observe minibeasts in a microhabitat and use a classification key to identify them.
- Explore examples of human impact (both positive and negative) on environments.

Common misconceptions

Some children may think:

- the death of one of the parts of a food chain or web has no or limited consequences on the rest of the chain
- there is always plenty of food for wild animals
- animals are only land-living creatures
- animals and plants can adapt to their habitats, however they change
- all changes to habitats are negative.

