



Knowledge

How can you group fish, amphibians, birds, reptiles and mammals?

**comparative**  
Living things can be grouped according to different criteria for e.g. according to where they live, type of organism or features  
For example a camel can belong in a group of vertebrates, a group of animals that live in the desert and group of animals that have four legs. This will then move onto them doing classification keys.

How can you compare the characteristics of a variety of different animals?

**Comparative / classifying**  
A classification key is a tool that is used to group living things to help us identify them. Using the information they gained last week create a classification key.

What are the 7 characteristics of living things?

**Identifying and classifying**  
MRS GREN—living things are called organisms and they do certain things to stay alive these are the life processes.  
Movement, respiration, sensitivity, growth, reproduction, excretion, nutrition

What impact have humans had on the environment over time?

**Observing over time**  
Environments 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:** nature reserves, ecological parks  
**Negative:** litter, urban development

Can animals be grouped into two or more groups?

**Identifying and classifying**  
Using a Venn diagram sort animals into groups  
Carnivore, omnivore, herbivore

How can human action have an impact on living things?

**Pattern seeking**  
Consider disposal of plastics and its impact on the oceans

How can we classify different plants / grasses?

**Identifying and classifying**  
Sort plants into flowering and non flowering plants then create a classification key to help identify plants.

Can we classify mini beasts according to their habitats?

**Identifying and classifying**  
Carefully observe mini beasts in a microhabitat and use a classification key to identify them.

Why are people cutting down the rainforests and what effect does that have?

**Research**  
Research deforestation and what impact it has on humans and animals.



## Vocabulary

biomes	A natural area of vegetation and animals.
Carnivore	An animal that eats meat
Classification key	A system that divide things into groups or types.
deciduous	Trees that lose leave in the autumn every year.
Evergreen	A tree or bush that has green leaves all year round.
Excretion	The process of eliminates faces, urine or sweat form the body.
Food chain	A series of living things that 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	Creature that does not have a spine.
Life processes	7 process that tell us that living things are alive (MRS GREN)
Micro habitat	A small part of the environment that supports the habitat such as a fallen log in a forest.
Mini beast	A small invertebrate animal such as an insect or spider.
Nutrition	The process of taking food into the body and absorbing the nutrients in the foods.
Omnivore	Person or animal that eats all kind of food incusing meat and plants.
Organism	A living thing.
Reproduction	When an animal or plant produces one or more individuals similar to itself.
Respiration	Process of breathing, inhaling or exhaling air.
urban	Belonging to or relating to a town or city.
Vegetation	Plants trees and flowers
Vertebrate	Creature that has a spine.

## Hurst Hill Primary School Knowledge Organiser

Science

Living things and their habitats

Year 4

Autumn 1

Biology

Biology is the science that understands living organisms, including animals and plants.

### Living things and their habitats

#### Statutory requirements

Pupils should be taught to:

- recognise that living things can be grouped in a variety of ways
- explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment
- recognise that environments can change and that this can sometimes pose dangers to living things.