

# Science Knowledge Organiser – Living Things

Year 6 Term 3

## What should I already know?

- Animals can be grouped into **carnivores**, **herbivores** and **omnivores**. They can also be grouped into **vertebrates** and **invertebrates**.
- Organisms** can be **classified** and we can use a **classification key** to identify them.
- Examples of **habitats** (including **microhabitats**) and the **organisms** that can be found there.
- Living things depend on each other to survive.
- How **environments** are changing.
- Food chains** demonstrate the direction in which **energy** travels.
- How **organisms** have **adapted** and **evolved** over time.



## Vocabulary

adaptation	a change in structure or function that improves the chance of survival for an animal or plant within a given environment.
taxonomist	a scientist who specializes in the classification, identification, and naming of living organisms.
characteristics	the qualities or features that belong to them and make them recognisable
classification key	a system which divides things into groups or types
habitat	the natural environment in which an animal or plant normally lives or grows
invertebrate	a creature that does not have a spine, for example an insect, a worm, or an octopus
microorganism	a very small living thing which you can only see if you use a microscope
organism	a living thing
species	a class of plants or animals whose members have the same main characteristics and are able to breed with each other
vertebrate	a creature which has a spine

## Where this fits in.

In year 4, you learnt about classification keys and how to identify animals and groups of animals. You will now develop your understanding further of the classification system. You will also know the various groups of animals such as mammals, amphibians, reptiles, birds and fish.

## What will I know by the end of the unit?

What is the Linnaean System?	Living things can be formally grouped according to characteristics. Carl Linnaeus was a pioneer of classification and invented the Linnaeus system.	
How do we classify living things?	Living things are grouped by Kingdoms. The classification system is structured by domain, kingdom, phylum, class, order, family, genus, species.	
How do we identify changes in the plant Kingdom?	We will look at a selection of tulips and discussed what they all had in common. Why are they all tulips even though there are observable differences? Then we will explore daffodils and create classification keys.  We will know that you can classify plants through a range of features, for example through flowering and non-flowering.	
What known facts can we classify animals with?	You will be describing how living things are classified into broad groups according to common observable characteristics and based on similarities and differences. For example, Vertebrates or invertebrates, warm or cold blooded, number of legs/limbs, how it breathes, how it reproduces, body covering (fur / hair/ scales / smooth skin/ feathers) or whether it has a beak or not.	
How do we classify unusual animals?	We will explore the platypus and decide which features would put it into different groups. We will give reasons for classifying animals based on specific characteristics. Then we will create our own imaginary animals, giving their key features and explaining which group they would best fit into.	