Year 4 Science

NC Unit: Living things and their habitats.	Living things: what's the same and what's different?	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 differences between the teeth of **carnivores** and **herbivores**.
- 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.
- How land use has changed over time and the effects this has on the **environment** (e.g. **urban** development)

Big Ideas this works towards:

- *Living things are special collections of matter that make copies of themselves, use energy and grow.*

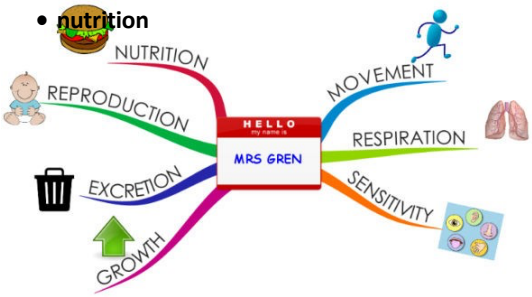
Vocabulary

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
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

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 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 **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 effects: nature reserves, ecological parks
  - negative effects: litter, **urban** development