

## Goonhavern Primary School- Science

**TOPIC: Living Things and their Habitats**

**YEAR: 4**

**STRAND: Biology**

### What should I know already?

- 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).

### 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

Vocabulary	
Biomes	A natural area of vegetation and animals.
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 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.
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.
Invertebrate	A creature that does not have a spine, for example an insect, a worm, or an octopus.
Life process	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.
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.
Urban	Belonging to, or relating to, a town or city.
Vegetation	Plants, trees and flowers.
Vertebrate	A creature that has a spine.

Investigate!
<ul style="list-style-type: none"> <li>• Complete Venn diagrams to show if living things can be grouped into two or more groups.</li> <li>• Use criteria to sort living things in a Carroll diagram.</li> <li>• 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.</li> <li>• Sort plants into groups (e.g. flowering plants and non-flowering plants) and then create a classification key to help others identify plants.</li> <li>• Carefully observe minibeasts in a microhabitat and use a classification key to identify them.</li> <li>• Use simple computer software programmes to create a branching classification key.</li> <li>• Explore examples of human impact (both positive and negative) on environments.</li> </ul>

