



## Year 4 Science Knowledge Organiser: Environments and Habitats



### Key Science Skills

- I can ask relevant questions and use different types of scientific enquiry to answer them.
- I can set up simple practical enquiries, comparative and fair tests.
- I can make systematic and careful observations
- I can gather, record, classify and present data in a variety of ways.
- I can record findings using simple scientific language, drawings and diagrams.
- I can use scientific evidence to answer questions and support my findings.

### Prior Learning

- Explore and compare the differences between things that are living, dead, and things that have never been alive
- Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other
- Identify and name a variety of plants and animals in their habitats, including micro-habitats
- Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.

### Key Knowledge

- Plants and animals rely on the environment to give them everything they need. Therefore, when habitats change, it can be very dangerous to the plants and animals that live there.
- Changes to an environment can be natural or caused by humans.
- Changes to an environment can have positive as well as negative effects. Here are some examples of things that can change an environment.
- You can use classification keys to help group, identify and name a variety of living things.

### Key Vocabulary

**Organisms** This is another word that can be used to mean 'living things'.

**Life processes** The things living things do to stay alive.

**Respiration** A process where plants and animals use oxygen gas from the air to help turn their food into energy.

**Sensitivity** The way living things react to changes in their environment.

**Reproduction** The process through which young are produced.

**Excretion** The process by which living things get rid of waste products.

**Nutrition** Food which provides living things with energy to live and stay healthy.

**Habitat** The specific area or place in which particular animals or plants may live.

**Environment** An environment contains many habitats and these include areas where there are both living and non-living things.

**Endangered Species** A plant or animal where there are not many of their species left and scientists are concerned that the species may become extinct.

**Extinct** When a species has no more members alive on the planet, it is extinct.

**Classification** This is where plants or animals are placed into groups according to their similarities.

**Vertebrates** Animals with a backbone.

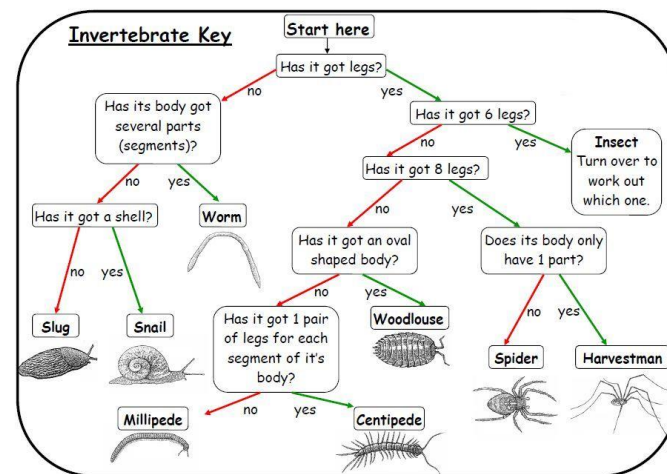
**Invertebrates** Animals without a backbone.

**Specimen** A particular plant or animal that scientists study to find out about its species.

**Characteristics** The distinguishing features or qualities that are specific to a species.

### Key Knowledge

- Animals can be grouped in lots of different ways based upon their characteristics.



## The Seven Life Processes

In order for something to be alive it must do all seven processes. All living things have these seven processes in common.

Movement Sensitivity Excretion Growth  
Respiration Reproduction Nutrition