

Year 3/4 Science Knowledge Organiser: Living things and their habitats



Subject specific skills

- Asking relevant questions and using different types of scientific enquiries to answer them
- · Setting up simple practical enquiries, comparative and fair tests
- Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- · Identifying differences, similarities or changes related to simple scientific ideas and processes
- · Using straightforward scientific evidence to answer questions or to support their findings
- 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

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

- To stay alive and healthy, all living things need certain conditions that let them carry out the seven life processes: Movement Respiration Sensitivity Growth Reproduction Excretion Nutrition
- 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.
- 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'.

<u>Life processes</u> The things living things do to stay alive.

<u>Respiration</u> 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.

<u>Nutrition</u> 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.

<u>Classification</u> This is where plants or animals are placed into groups according to their similarities.

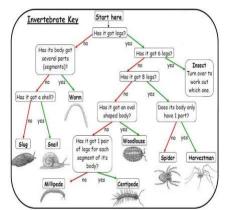
Vertebrates Animals with a backbone.

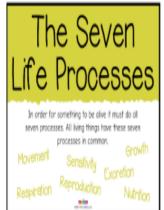
Invertebrates Animals without a backbone.

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









Non-Flowering Plants

















vertebrates



