

## Science Knowledge Organiser

### Living things and their Habitat

What will I learn by the end?

*Living things can be grouped according to different criteria's.*

#### Lesson Sequence

Lesson 1 - To be able to discuss what I know about Animals and their habitats.

Lesson 2 – To understand that living things can be classified in a variety of way and to understand that vertebrate animals includes fish, amphibians, reptiles, birds, and mammals

Lesson 3 - To define an invertebrate and know that invertebrates can be classified into more groups and includes spiders, worms and snails.

Lesson 4 – To use a simple classification key to classify animals and know what animals can be found in my local area.

Lesson 5 - To classify animals found in my local area and research invertebrates found in my school field.

Lesson 6 - To describe environmental dangers to endangered species and know about positive and negative impacts that humans can have on environments.

Lesson 7 - To know that plants are living things that adapt to their environment and group plants together into different categories.

Lesson 8- To revise all my learning for the topic: 'Living Things and Their Habitats' and to prepare for the learning of my new topic: 'Animals, Including Humans'.

#### Concept Links/Prior Knowledge

*Year 2 – know and compare the differences between things that are living, dead and things that have never been alive. The basic needs of animals and plants. Habitats and Micro-habitats. Identify and name a group of animals and plants. Simple food chains.*

#### Vocabulary Revision (vocabulary I have been taught before)

**Carnivores** - animals get their food from eating other animals

**Extinct** - When a species has no more members alive on the planet.

**Food Chain** - shows how each animal gets its food. Food chains are one of the ways that living things depend on each other to stay alive.

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

**Herbivores** - animals get their food from eating plants.

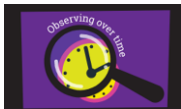
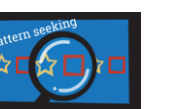
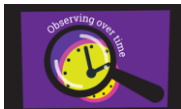
**Life Processes** - The specific area or place in which particular animals or plants may live.

**Micro-habitat** – a habitat which is a small place, ie fallen branch or stone.

**Omnivores** - animals get their food from eating some plants and some other animals

**Predators** - animals that eat other animals

**Prey** - animals that they eaten by predators.



Sticky learning	
New Knowledge	Skills
<ul style="list-style-type: none"> <li>I know that living things can be grouped in a variety of ways 13/09, 20/09</li> <li>I know what a classification key is and can use one to help group, identify and name a variety of living things in their local and wider environment 27/09</li> <li>I know that environments can change and that this can sometimes pose dangers to living things.</li> <li>To know vertebrate animals fall into groups such as fish, amphibians, reptiles, birds, and mammals;13/09</li> <li>To know that invertebrates include snails and slugs, worms, spiders, and insects.20/09</li> <li>Know that plants can be grouped into categories such as flowering plants (including grasses) and non-flowering plants, such as ferns and mosses.</li> <li>I know about examples of human impact (both positive and negative) on environments, for example, the positive effects of nature reserves, ecologically planned parks, or garden ponds, and the negative effects of population on a development, litter or deforestation.</li> <li>I can use and make simple guides or keys to explore and identify plants and animals in my local area.</li> </ul>	<ul style="list-style-type: none"> <li>I can ask questions and use different types of scientific enquiries to answer them</li> <li>I can make some decisions about which types of scientific enquiry are likely to be the best ways of answering questions.</li> <li>I can make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</li> <li>I can identify differences, similarities and changes related to scientific ideas and processes.</li> <li>I can use straight forward scientific evidence to answer questions or to support my findings</li> <li>I can carry out research to answer scientific questions from secondary sources</li> </ul>

New vocabulary I will learn
<p><b>Characteristics</b> – The distinguishing features or qualities that are specific to a species</p> <p><b>Classification</b> – This is where plants or animals are placed into groups according to their similarities.</p> <p><b>Endangered species</b> – A plant or animal where there are not many of their species left and scientists are concerned that the species may become extinct.</p> <p><b>Environment</b> – An environment contains many habitats and these include areas where there are both living and non-living things.</p> <p><b>Excretion</b> – The process by which living things get rid of waste products</p> <p style="text-align: center;"><b>Invertebrates</b> - Animals without a backbone.</p> <p><b>Nutrition</b> – The process of obtaining food to provide living things with energy to live and stay healthy.</p> <p><b>Organisms</b> - This is another word that can be used to mean 'living things'.</p> <p><b>Reproduction</b> – The process through which young are produced.</p> <p><b>Respiration</b> - A process where plants and animals use oxygen gas from the air to help turn their food into energy.</p> <p><b>Sensitivity</b> – The way living things react to changes in their environment.</p> <p><b>Specimen</b> - A particular plant or animal that scientists study to find out about its species.</p> <p style="text-align: center;"><b>Vertebrates</b> - Animals with a backbone.</p>

### Visual Representations

**MRS GREN - Life Processes**

*a classification key – tool that is used to group living things to help us identify them.*