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| **St Clement’s Catholic Primary School- Science** |
| **Topic:** Living Things and their Habitats | **Year:** 4 | **Term:** Autumn |
| **What should I already know?** | **Vocabulary** |
| 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 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)
 | **Organism** | An individual living thing, such as a plant, an animal, or bacteria. |
| **Classifying** | To put into groups according to things that are similar. |
| **Unique** | Being the only one of its type. |
| **Vertebrate** | Having a backbone. |
| **Invertebrate** | Without a backbone. |
| **Mammal** | Any animal that has hair and feeds its babies with milk from the mother. |
| **Habitat** | The natural environment of an animal or plant. |
| **Ecosystem** | A community of living things, together with their environment. |
| **Food chain** | A series of living beings in which each serves as food for the next. |
| **Energy** | The ability to have force or power or to do work. |
| **Producer** | A living thing that makes its own food. |
| **Consumer** | A living thing that cannot make its own food and so received its energy through consuming (eating) other plants or animals. |
| **What will I know by the end of the unit?** | **Diagrams** |
| * All **living things,** which can also be called **organisms**, have to do certain things to stay alive. These are the **life processes**:

**Movement** – moving, can be fast and obvious or slow and over time**Respiration** – releasing energy from food**Sensitivity** – responding to their environment**Growth** – getting bigger and older**Reproduction** – producing offspring**Excretion** – getting rid of waste**Nutrition** – taking in food* 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.
* A **classification key** is a tool that is used to group living things to help us identify them.
* **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

**CHANGING ENVIRONMENTS*** **NATURAL CHANGES** – different seasons can change habitats. As the weather changes so can the plant life of the habitat. Look at the area around you; do you notice different plants and possible different animals at different times of the year?
* **HUMAN CHANGES** – How humans live and what they do can impact habitats both negatively and positively.

**Negative ways:*** **Deforestation** - cutting down trees for a range of reasons
* **Littering** – dropping rubbish or leaving large objects lying in the environment
* **Pollution** – introducing harmful substances into the environment.

**Positive ways:*** Protecting endangered species via conservation projects
* Cleaning bodies of water
* Recycling
 |  Carroll DiagramVenn Diagram |
| **Key facts** | **Famous scientist(s)** |
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