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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 Diagram  Venn Diagram | | |
| **Key facts** | | **Famous scientist(s)** | | |
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