Bickerstaffe CE Primary School
Spring 1 – Year 4 - Living things and their habitats
Science Knowledge Organiser

Key Vocabulary

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.

Plants can also be classified into groups. For example plants that produce seeds and those that don't.

Sticky Knowledge

Substantive (what key _knowledge_ are we going to learn?)

Changes to the environment

Changes to the environment can be natural or caused by humans. Changes to the environment can have a positive and negative effects.

Natural	Human-Made
• Earthquakes • Storms • Floods • Droughts • Wildfires • The seasons	• Deforestation • Pollution • Urbanisation • The introduction of new animal or plant species to an environment.

Classification

You can use classification keys to help group, identify and name a variety of living things.

Life processes
To stay alive and healthy, all living things need certain conditions that let them carry out key life processes.

Disciplinary (how are we going to achieve this?)
- Observe and explore plants and animals throughout the year.
- Compare and contrast the living things and explain your reasoning.
- Create and use a classification keys to name unknown living things.
- Classify living things found in different habitats accurately.
- Create a simple identification key.
- Use fieldwork to explore human impact on the local environment and explain the positive and negative impacts.
- Use secondary sources to research and explain about environments.
- Use secondary sources to find out about human impact on the environment and how it can be prevented.

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

vertebrates — mammals, fish, birds, reptiles, amphibians

invertebrates — insects, spiders, worms, slugs and snails