



# Year 6 Science Knowledge Organiser: Living Things and their Habitats



## Subject Specific Skills

- I can give reasons for classifying plants and animals based on specific characteristics
- I can plan different types of scientific enquiries to answer questions
- I can describe how living things are classified into broad groups
- I can record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs

## Prior Learning

- Recognise that living things can be grouped in a variety of ways
- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird
- Describe the life process of reproduction in some plants and animals.

## Key Knowledge:

### Classification

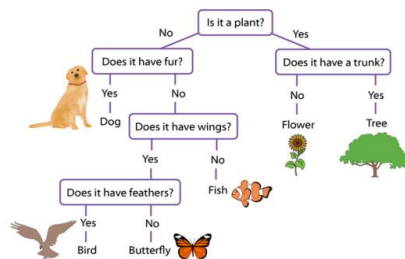
Classification is a way of grouping different living things together by their features. To help us identify and study them, they are classified into different groups. Classification involves placing living things into progressively smaller and smaller groups.

These groups are:

**kingdom, phylum, class, order, family, genus and species.**

### Classification Key

A classification key is a way of identifying unknown organisms based on their distinct features.



## Key Vocabulary

**Animals:** Living organisms that feed on plants or other animals and, typically, have nervous systems that enable them to respond to stimuli.

**Biologist:** A scientist who studies living organisms and how they relate to their environments.

**Fungi:** A group of organisms that include microorganisms like yeast and moulds. Fungi play an important role in decomposing plant and animal matter. Examples of fungi include athlete's foot, ringworm, mushrooms and toadstools.

**Kingdom:** One of the five groups that many scientists use to classify living things: animal, plant, fungi, protocista and prokaryote.

**Plants:** A living organism that is able to make its own food by the process of photosynthesis.

**Species:** A class of living organism that can breed with others of the same class to produce fertile offspring.

## Key Individual:

Carl Linnaeus



## Key Knowledge:

### Invertebrates and vertebrates

An invertebrate has no internal skeleton or backbone. Some invertebrates, such as insects and crustaceans, have hard exoskeletons, while others, like jellyfish, are supported by water.



A vertebrate is an animal with a bony spinal column or backbone. It has a spinal cord and a skull enclosing the brain and eyes. Vertebrates are divided into five main groups.



### Plants

Plants can be divided into two main groups: **flowering** and **non-flowering** plants.

- Non-flowering plants include conifers, ferns and mosses.
- Flowering plants include all other plants, including most trees, grasses and shrubs.
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### Microorganisms

A microorganism is an organism that is too small to see without a microscope. Common microorganisms include bacteria and some fungi.