

Scientific Enquiry

Subject Specific Vocabulary



identifying and classifying



Identifying means knowing what something is and naming it. **Classifying** means grouping things together if they have something in common. We will use information about the characteristics of an unknown animal or plant to assign it to a group.

researching



We will **research using secondary sources** to learn about the formal classification system devised by Carl Linnaeus and why it is important. We will also use secondary sources to research the characteristics of animals that belong to a group.

Working Scientifically

Asking scientific questions

Planning an enquiry

Observing closely

Measuring (taking measurements)

Gathering and recording results

Presenting results

Interpreting results

Concluding (drawing conclusions)

Predicting

Evaluating an enquiry

vertebrate

Vertebrates are animals with a backbone.

Vertebrates can be divided into five animal groups: fish, amphibians; reptiles, birds and mammals. Each group has common characteristics. For example, amphibians are cold-blooded, have lungs and lay eggs. When adult, they can live in water and on land.

Mammals are warm-blooded with hair or fur. They give birth to live young. Reptiles have dry, scaly skin that lay soft-shelled eggs on land.



invertebrate

Invertebrates are animals without a backbone.

Invertebrates can be divided into a number of groups, including insects, spiders, snails and worms. Insects have bodies in 3 sections with a hard outer casing, 6 legs and 2 sets of wings.

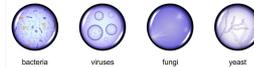


Spiders are arachnids. They have 2 body parts, 8 legs, 6 or 8 eyes and spinnerets on their abdomens that produce silk.



micro-organism

Living things can be grouped according to characteristics. Plants and animals are two main groups but there are other living things such as **microorganisms**. **Microorganisms** are living things that are too small to be seen with the naked eye. They are normally viewed using a microscope. Viruses, bacteria and yeast as well as fungi: toadstools and mushrooms are the main



flowering plants

Flowering plants can make their own food whereas animals cannot. Plants can generally be divided into two main groups: **flowering plants** and **non-flowering plants**. **Flowering plants** produce seeds, fruits and flowers in order to reproduce. Examples of flowering plants are: sunflowers, orchids, lavender, oak trees and potatoes.



non-flowering plants

Non-flowering plants are those that do not ever produce flowers. Like flowering plants, they make their own food. They can be divided into two main groups - those that reproduce with spores and those that reproduce with seeds.

Non-flowering plants that produce spores include mosses and ferns.

Non-flowering plants that produce seeds include conifers such as pines and firs.



Things you learnt in previous topics

In Year 4 you recognised that living things can be grouped in a variety of ways. You explored and used classification keys to help group, identify and name a variety of living things in my local and wider environment.

In Year 5 you described the differences in the life cycles of a mammal, an amphibian, an insect and a bird. You described the life process of reproduction in some plants and animals.



How this connects with future learning

Later in Year 6 you will learn to recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. You will learn to identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

In KS3, you will learn the differences between species.