ROSES Year 3/4 Science: Living things and their habitats SUM 1st half 2026

Morda CE Primary School

Key Learning

Year 3

Describe reasons for criteria for sorting and grouping, for example, number of legs, shape of leaf.

Recognise and talk about different living things found in different places, for example, ponds, woods.

Use a simple food chain, identifying and naming different sources of food.

Identify ways in which an animal or plant is suited to its environment, for example, a fish having fins to help it swim.

Year 4

Describe features of plants and animal and compare similarities and differences between sub-groups, recognising that all living things can be grouped in different ways.

Explore and use classification keys to help to group, identify and name a variety of living things in the local and wider environment.

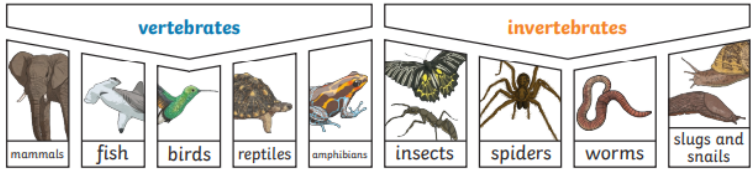
Construct and interpret a variety of food chains, identifying producers, predators and prey.

Recognise that environments can change and that this can pose dangers to living things.

Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.

Key Knowledge

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

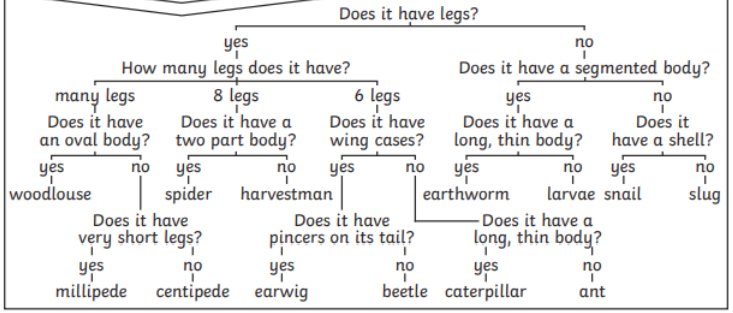


Vertebrates can be separated into five broad groups.

You could sort **invertebrates** you might see around school in different ways, such as in this example. The vast majority of living things on the planet are **invertebrates**.

You can use **classification** keys to help group, identify and name a variety of living things. Here is an example of a **classification** key:

Invertebrate Classification Key



Life Processes

To stay alive and healthy, all living things need certain conditions that let them carry out the seven **life processes**:

Movement
Respiration
Sensitivity
Growth
Reproduction
Excretion
Nutrition

Key Scientific Vocabulary

Key Vocabulary	
organisms	This is another word that can be used to mean 'living things'.
life processes	The things living things do to stay alive.
respiration	A process where plants and animals use oxygen gas from the air to help turn their food into energy.
sensitivity	The way living things react to changes in their **environment**.
reproduction	The process through which young are produced.
excretion	The process by which living things get rid of waste products.
nutrition	The process of obtaining food to provide living things with energy to live and stay healthy.
habitat	The specific area or place in which particular animals or plants may live.
environment	An **environment** contains many **habitats** and these include areas where there are both living and non-living things.
endangered species	A plant or animal where there are not many of their species left and scientists are concerned that the species may become **extinct**.
extinct	When a species has no more members alive on the planet, it is **extinct**.

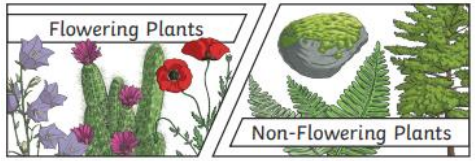
Changes to an **environment** can be natural or caused by humans. Changes to an **environment** can have positive as well as negative effects. Here are some examples of things that can change an **environment**.

Natural
- earthquakes
- storms
- floods
- droughts
- wildfires
- the seasons

Human-Made
- deforestation
- pollution
- urbanisation
- the introduction of new animal or plant species to an **environment**
- creating new nature reserves

Plants and animals rely on the **environment** to give them everything they need. Therefore, when **habitats** change, it can be very dangerous to the plants and animals that live there.

Plants can be sorted into many different groups. For example:



Enquiry types

To recognise that living things can be grouped in a variety of ways.

To gather, record, classify and present data in a variety of ways to help in answering questions.

To identify and name a variety of living things by generating questions to sort Vertebrates/invertebrates in a classification key.

To identify differences, similarities or changes related to simple scientific ideas and processes by identifying vertebrates/invertebrates by their similarities and differences.

To identify and name a variety of living things in their local and wider environment by creating classification keys.

To recognise that environments can change and that this can

Common Misconceptions

Some children may think:
- the death of one of the parts of a food chain or web has no or limited consequences on the rest of the chain
- there is always plenty of food for wild animals
- animals are only land-living creatures
- animals and plants can adapt to their habitats, however they change
- all changes to habitats are negative.

- Whales, jellyfish, and starfish are all fish.

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.

sometimes pose dangers to living things by identifying changes and dangers in the local habitat. To record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.		