

Year 6 – All living things.

Y6 – All living things

To describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals.

To give reasons for classifying plants and animals based on specific characteristics.

Key Vocabulary

Characteristics – Special qualities or appearances that make an individual or group of things different to others.

Classify – To sort things into different groups.

Taxonomist – A scientist who classifies different living things into categories.

Key – A key is a series of questions about the characteristics of living things. A key is used to identify or decide which group it belongs to by answering 'yes' or 'no' questions.

Bacteria – A single celled microorganism.

Microorganism – An organism that can only be seen using a microscope, e.g. bacterial, mould and yeast.

Microscope – A piece of equipment that is used to view very tiny (microscopic) things by magnifying their appearance.

Species – A group of animals that can reproduce to produce fertile offspring.

Prior learning

Y5 – Living things and their habitats.

To describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.
To describe the life process of reproduction in some plants and animals.

Y4 Living things and their habitats

To recognise that living things can be grouped in a variety of ways.
To explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.
To recognise that environments can change and that this can sometimes pose dangers to living things.

Future learning

KS3 - Interactions and interdependencies

Relationships in an ecosystem

To know the interdependence of organisms in an ecosystem, including food webs and insect pollinated crops.
To know the importance of plant reproduction through insect pollination in human food security.
To know how organisms affect, and are affected by, their environment, including the accumulation of toxic materials.

Key Knowledge.

Scientists, called Taxonomists, sort and group living things according to their similarities and differences.

In 1735, Swedish Scientist Carl Linnaeus first published a system for classifying all living things. An adapted version of this system is still used today: The Linnaeus System.

Living things can be classified by these eight levels. The number of living things in each level gets smaller until the one animal is left in its species level. This is how a dog would be classified.

Each group allows scientists to observe and understand the characteristics of living things more clearly. They group similar things together then split the groups again and again based on their differences.

Microorganisms are viruses, bacteria, moulds and yeast. Some animals (dust mites) and plants (phytoplankton) are also microorganisms.

Microorganisms are very tiny living things that can only be seen using a microscope. They can be found in and on our bodies, in the air, in water and on objects around us.

Classifying Species

Here you can see how a species can be classified at each level of the standard system.

Domain: Eukarya	jackal, clownfish, cat, dog, ladybird, daisy, rabbit, fox, human
Kingdom: Animals	jackal, clownfish, cat, dog, ladybird, rabbit, fox, human
Phylum: Chordata	jackal, clownfish, cat, dog, rabbit, fox, human
Class: Mammals	jackal, cat, dog, rabbit, fox, human
Order: Carnivora	jackal, cat, dog, fox
Family: Canidae	jackal, dog, fox
Genus: <i>Canis</i>	jackal, dog
Species: <i>Lupus</i>	dog

