

Science Knowledge Organiser—Living Things and their Habitat

Curriculum Objectives

By the end of this unit, your child will be able to:

- Give reasons for classification of animals, using examples as a guide.
- Describe Carl Linnaeus and his development of his classification system.
- Match groups of animals to their characteristics.
- Classify creatures based on their characteristics.
- Name types of microorganism.
- Describe the useful and harmful effects of different microorganisms.
- Set up an investigation into harmful microorganisms.
- Complete descriptions on the characteristics of groups of organisms.
- Draw conclusions based on their results.

Key knowledge

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

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

Domain: Eukarya	jackal, clownfish, cat, dog, ladybird, daisy, rabbit, fox
Kingdom: Animals	jackal, clownfish, cat, dog, ladybird, rabbit, fox
Phylum: Chordata	jackal, clownfish, cat, dog, rabbit, fox
Class: Mammals	jackal, cat, dog, rabbit, fox
Order: Carnivore	jackal, cat, dog, fox
Family: Canidae	jackal, dog, fox
Genus: Canis	jackal, dog
Species: Lupus	dog



lizard



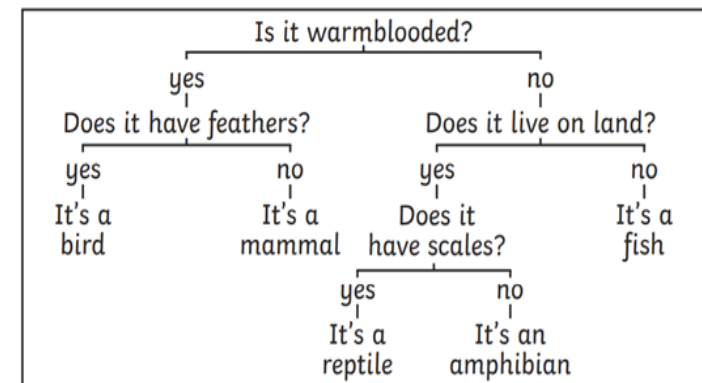
clownfish



eagle



frog



Helpful Microbes	Harmful Microbes
Bacteria – cheese	Bacteria – salmonella is a bacterium that can lead to food poisoning
Yeast – wine	Virus – chicken pox and flu are examples of viral diseases
Bacteria – yoghurt	Fungi – athlete's foot
Yeast – bread dough	Bacteria – plaque
Penicillium fungi - antibiotics	Fungi - mould



Key Vocabulary/Terminology



Characteristics	Special qualities or appearances that make an individual or group 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 living things. A key is used to identify a living thing or decide which group it belongs to.
Bacteria	A single-celled microorganism.
Microorganism	An organism that can only be seen using a microscope, e.g. bacteria, mould and yeast.
Microscope	A piece of equipment that is used to view very tiny things by magnifying their appearance.
Species	A group of animals that can reproduce to produce fertile offspring.

Key facts

Microorganisms are viruses, bacteria, moulds and yeast. Some animals (dust mites) and plants (phytoplankton) are also microorganisms. They can be seen by using a microscope, and can be found on our bodies.

Some animals have no skeleton inside them, they have a hard outer casing—these are called exoskeletons.

When we are looking at skeletons we can sort them into either vertebrates or invertebrates. Vertebrates have a backbone or spine and invertebrates do not.

Some animals have no skeleton at all! They have no bones or hard outer casing which means they have no protections. Slugs and worms are examples of this.

