

Year 6 Autumn Term Science Knowledge Organiser

KEY QUESTION:

How and why do we classify animals and plants into broad groups?

Classification

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.

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

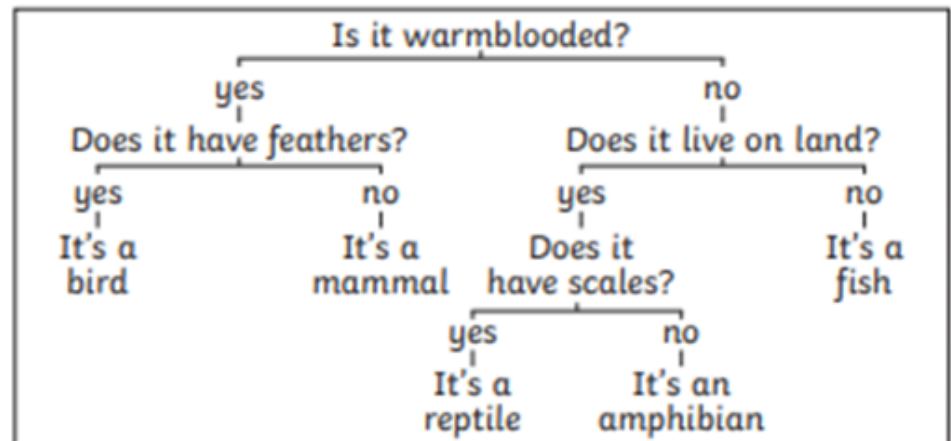
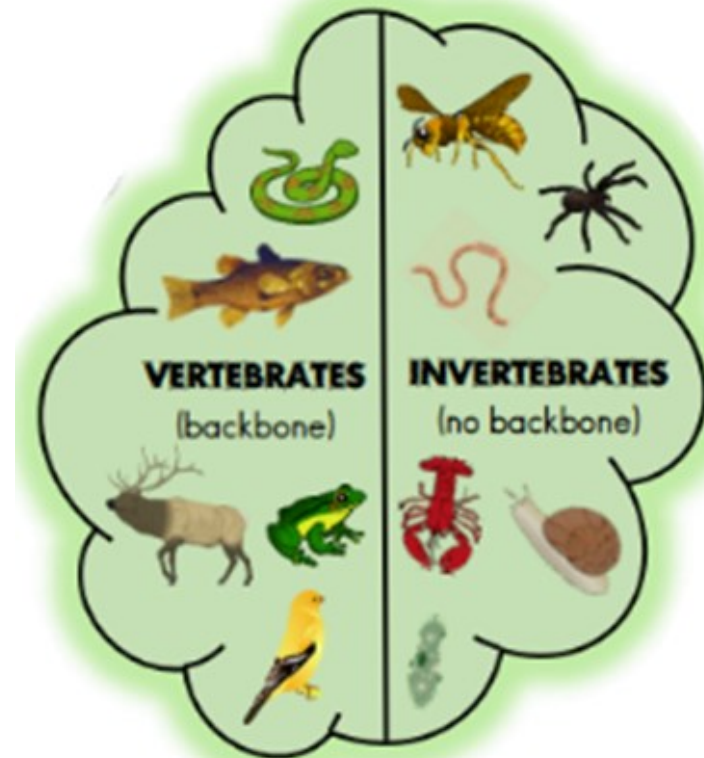
Genus: Canis jackal, dog

Species: Lupus dog

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.



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



Living Things Vocabulary

classify	invertebrates	yeast	observations
species	vertebrates	compare	classification
system	microorganisms	order	organisms
species	similarities	family	bacteria
kingdom	characteristics	Linnaeus	differences

Arachnid

An animal that has eight legs and a body formed of two parts

Reptile

A vertebrate animal that has dry scaly skin and lays eggs on land

Amphibian

An animal that is born with gills then develops lungs, lays eggs in water, damp skin, body temperature changes

Crustaceans

Mostly live in water with a hard shell and segmented body

Vertebrate

An animal with backbone

Invertebrate

An animal without a backbone

Bird

A warm-blooded egg-laying vertebrate animal with feathers, wings and normally able to fly.

What Are Microorganisms?

Some animals and plants are microorganisms. Examples include dust mites and plankton.



A magnified image of a household dust mite.



Plankton are microscopic organisms drifting in fresh or sea water, including plants and animals.

Other microorganisms are fungi, such as mould, yeast and Penicillium.



Mould is the common word for any fungus that grows on food or other materials.



Penicillium fungus is used to make the antibiotic penicillin.



Yeast is a microscopic fungus that can be used to raise bread dough.

Activities to complete at home. Bring in your work so it can be celebrated and shared .

1. Make a list of as many different animals for each group that you can
2. Make a model of a micro-organism.
3. Create a crossword with definition clues linked to the keyword vocabulary list.