

Key Vocabulary

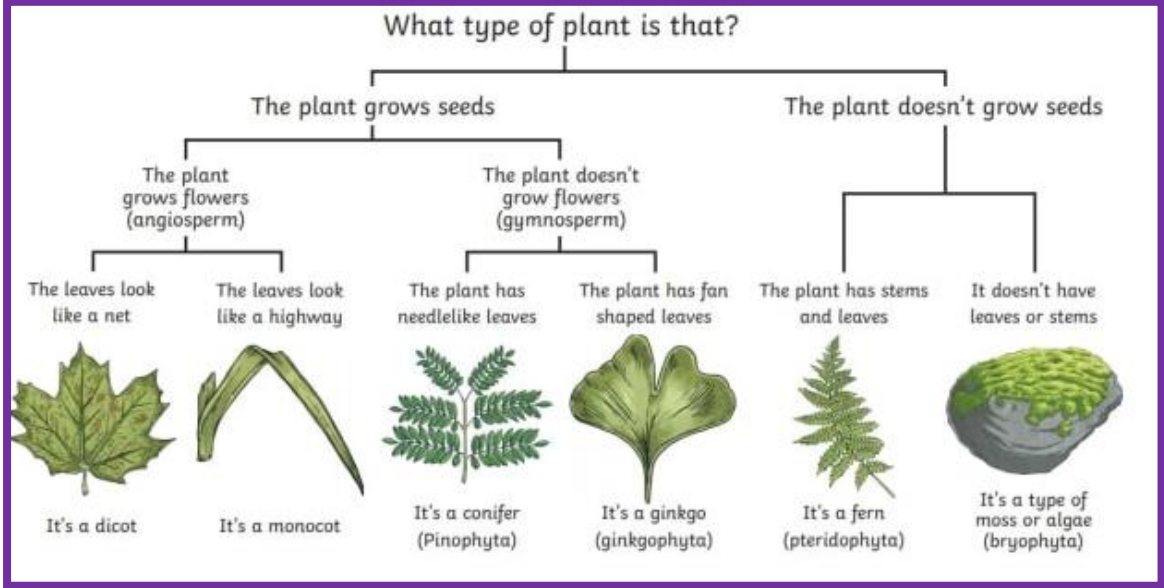
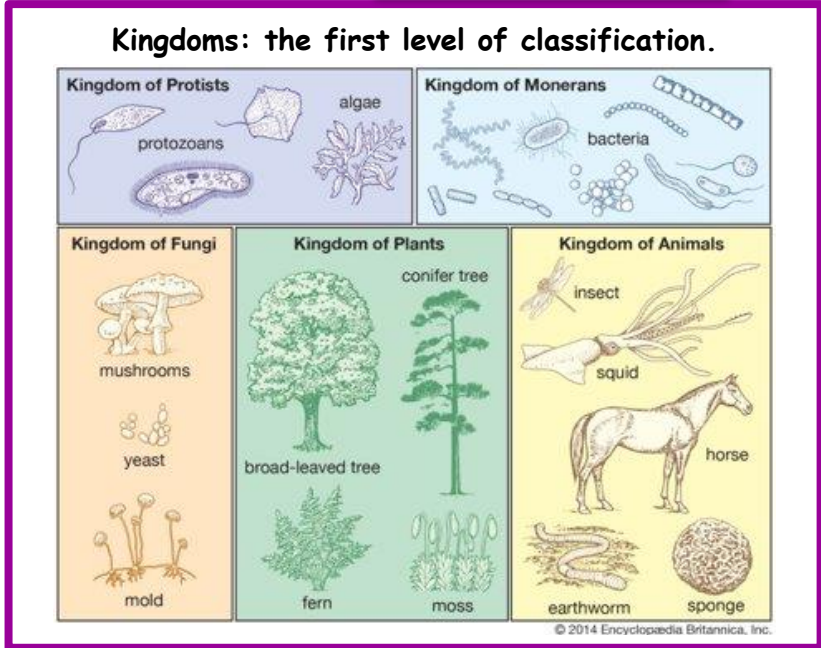
Bacteria:	Uni-cellular living organisms with free floating DNA.
Cellular (uni- or multi-):	The structure of a living organism - whether it consists of a single cell or many.
Characteristics:	Aspects of appearance or other qualities that make one living organism different to another.
Classification:	The process of sorting living organisms into groups based on the characteristics they share and evolutionary links.
Dichotomous Key:	A classification tool that scientists use, usually presented in the form of a flowchart, giving you two options on each branch.
DNA:	The code that gives living things their instructions to function, grow, reproduce.
Fungi:	A living thing that is multi-cellular and gets nutrition from its environment.
Kingdoms:	The first level of classification where living organisms are organised into animals, plants, fungi, protists & monera.
Micro-organism:	A living organism that is so small in size that it cannot be seen by the naked eye.
Nucleus:	The part of a cell that contains the DNA - found in all living organisms except bacteria.
Taxonomy:	The science of naming, identifying and classifying organisms.
Virus:	An organism that can only reproduce inside the cells of living organisms.

Year 6, Living Things & their habitats.



Key Knowledge:
Classification of living things is essential so that scientists can study them effectively. The classification system used today is based on the work of Carl Linnaeus, a Swedish scientist living in the 1700s. He grouped living organisms into 5 groups that he called Kingdoms based on their characteristics.

Animal kingdom can be further sub-divided into vertebrates and invertebrates. Vertebrates can be further classified into mammals, birds, fish, reptiles and amphibians. Invertebrates can be further classified into insects, arachnids, annelids, crustaceans, molluscs and echinoderms.



Working Scientifically



How can I group these living organisms?
How can I justify the decisions that I have made?



What factors increase the growth rate of the fungi, mould?



Which micro-organisms are heroes and which are villains?

Invertebrates do not have a backbone

Annelids

Annelids have no legs and segmented bodies.



worm



leech

Echinoderms

Echinoderms are animals with 'spiny-skin'.



starfish



sea urchin

Molluscs

Molluscs have soft bodies. Many have a hard outer shell.



snail



octopus

Coelenterates

Coelenterates have soft bodies with stinging cells.



jellyfish



coral

Arthropods - animals with hard external skeletons and jointed limbs

Arachnids

Arachnids have eight legs and two body parts.



spider



scorpion

Crustaceans

Crustaceans have an exoskeleton, many legs and antennae.



lobster



crab

Insects

Insects have six legs and generally one or two pairs of wings.



bee



butterfly

Myriapods

Myriapods have many legs and body segments.



millipede

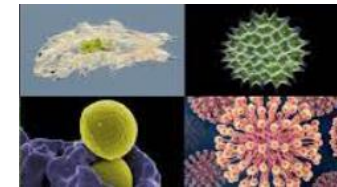


centipede

Micro-organisms:

Micro-organisms are very tiny living things. They are so small that they are not visible to the naked eye and so a microscope is needed to see them.

They can be found in almost every habitat on Earth; they can live on & in our bodies, in the air, in water and on the objects that surround us.



Bacteria: can cause illnesses or food poisoning but can also be beneficial: needed to make yoghurt & cheese and they aid in the digestion of our food.

Viruses: these micro-organisms live within the cells of other organisms and so are not considered to be living themselves. They infect plants and cause illnesses.

We rely on our immune system to fight viruses.

Fungi: not all fungi are microscopic. They feed on materials found within their environment. They can be poisonous or cause skin infections.

However, fungi make bread rise (yeast) and are used in the making of antibiotics.