

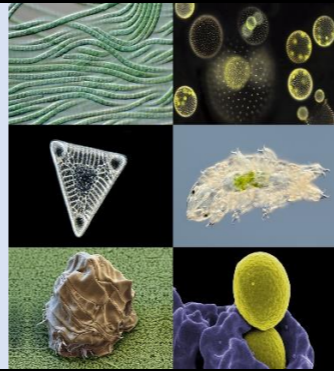
Cunningham Hill Junior School - Science Knowledge Organiser - Year 6 - Living Things and their Habitats


Key Vocabulary:

1	characteristics	Special qualities or appearances that make an individual or group of things different to others.
2	classify	To sort things into different groups.
3	taxonomist	A scientist who classifies different living things into categories.
4	key	A key is a series of questions about the characteristics of living things. A key is used to identify a living thing or decide which group it belongs to by answering 'yes' or 'no' questions.
5	bacteria	A single-celled microorganism.
6	microorganism	An organism that can only be seen using a microscope, e/g/ bacteria, mould and yeast.
7	microscope	A piece of equipment that is used to view very tiny (microscopic) things by magnifying their appearance.
8	species	A group of animals that can reproduce to produce fertile offspring.

Microorganisms:

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



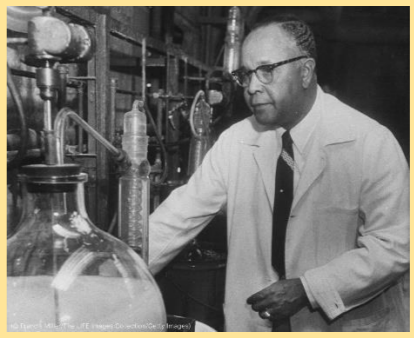


Microorganisms are very tiny living things that can only be seen using a microscope. They can be found in and on our bodies, in the air, in water and on objects around us.

Microbes:

Helpful Microbes	Harmful Microbes
Bacteria - cheese	Bacteria - salmonella
Bacteria - yoghurt	Virus - chicken pox
Yeast - bread dough	Bacteria - plaque
Yeast - wine	Fungi - mould
Penicillin Fungi - antibiotics	Fungi - athletes foot

Scientist Study:

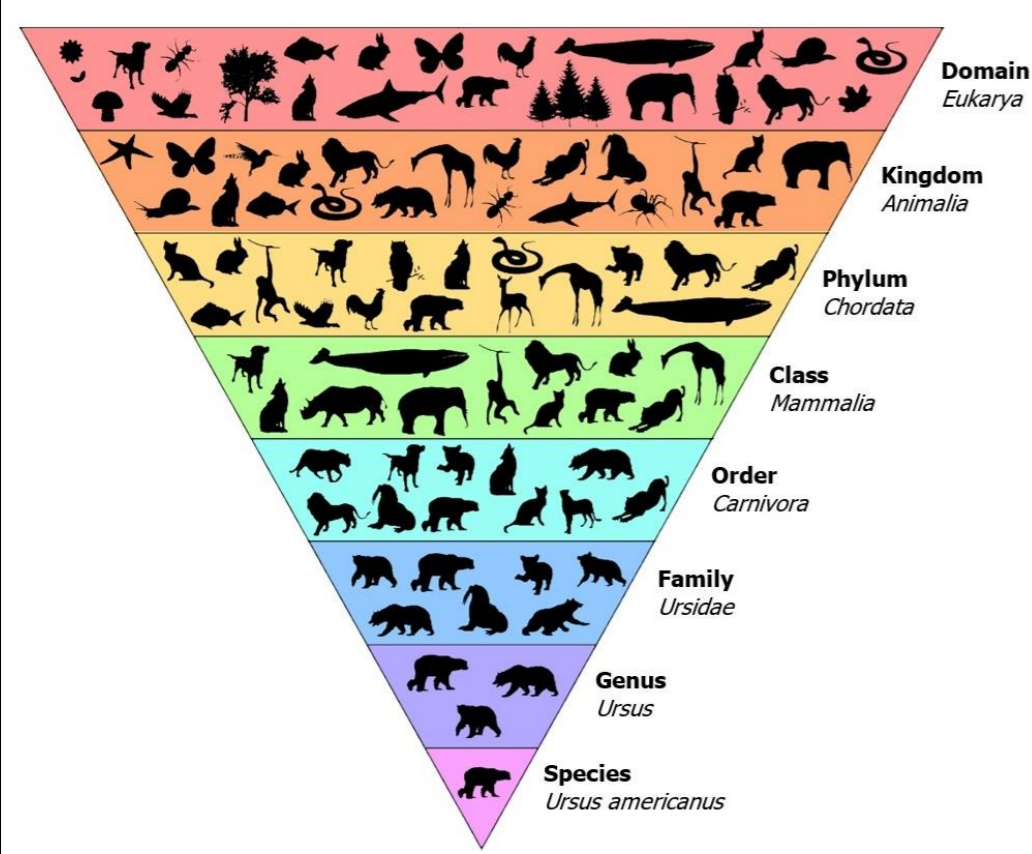


Percy L. Julian was an American chemist. He was best known for using soybeans to create hormones in his laboratory. He used the microbes found in plants to develop medicines.

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



Taxonomy of Living things:



Biological classification is a system used by scientists to describe organisms, or living things. It is also known as scientific classification or taxonomy. To classify things means to place them in different categories, or groups. Scientists place living things in groups based on the features that the living things share.

This classification system, was created by Carl Linnaeus a Swedish scientist in 1735 and is still used today.



In this example, you can see a range of different animals in the top layer, but as you move through each section animals are filtered out, leaving only animals that fit specific criteria finally leading to one specific species (American Black Bear).

The 7 Levels of Classification:

Kingdom	5 widely accepted kingdoms for classification: monera, protists, fungi, plants and animals.
Phylum	Divisions based on shared physical characteristics among organisms.
Class	Classes are based on very important and more detailed similarities.
Order	Orders are based on characteristics listed on a taxonomy key.
Family	Groups of organisms that share certain adaptive traits. They have a common ancestry.
Genus	A way to describe the generic name for an organism.
Species	Species is the specific name given to a living organism.