## Science Knowledge Organiser Living things and their habitats B

Tregonning Y5/6



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 a living thing or decide which group it belongs to by answering 'yes' or 'no' questions.	

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

Is it warmblooded?				
yes		n	0	
Does it have feathers?		Does it live	on land?	
yes	no	yes	no	
It's α	It's α	Does it	It's α	
bird	mammal	have scales?	fish	
	It'	es no s a It's an tile amphibi		

## 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.



Kingdom: Animalia jackal, clownfish, cat, dog, ladybird, rabbit, fox

Phylum: Chordata jackal, clownfish, cat, dog, rabbit, fox

Class: Mammalia jackal, cat, dog, rabbit, fox

Order: Carnivora 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.

Key Vocabulary		
bacteria	A single-celled microorganism.	
microorganism	An organism that can only be seen using a <b>microscope</b> , e.g. bacteria, 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.	

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

## 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.





