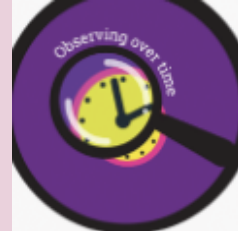
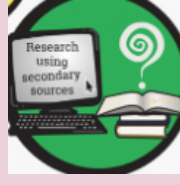


YEAR 6 - LIVING THINGS AND THEIR HABITATS

ENQUIRY AND WORKING SCIENTIFICALLY SKILLS COVERED



THIS UNIT LINKS TO

KS1: Living Things and their habitats

LKS2: Living Things and their Habitats

AT THE END OF THE UNIT YOU WILL KNOW

- how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals
- how to give reasons for classifying plants and animals based on specific characteristics

CARL LINNAEUS

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.



organisms	microorganisms	microbes	genus	species	characteristics	taxonomists
an individual animal, plant or single-celled life form	can only be seen using a microscope	type of microorganism	a taxonomic category that ranks above species and has a Latin name, e.g. <i>Leo</i>	a group of living organisms consisting of similar characteristics	special qualities or appearances that make an individual or group of things different to others	a scientist who classifies different living things into categories

VERTEBRATE AND INVERTEBRATE GROUPS

Vertebrate Groups				
Mammal	Bird	Reptile	Amphibian	Fish
				
warm-blooded	warm-blooded	cold-blooded	cold-blooded	cold-blooded
fur or hair	feathers	scales or scutes	moist or slimy skin	live in water
give birth to live young	lay eggs	usually lay eggs	often undergo metamorphosis	scales and fins
produce milk	beak and wings			gills

Some Invertebrate Groups			
Arthropod	Annelid	Mollusc	Echinoderm
			
segmented legs	segmented bodies	segmented bodies	live in salt water
include insects, crustaceans and arachnids	no legs include earthworms and leeches	no legs include slugs and octopuses	tube feet include sea stars and sea urchins

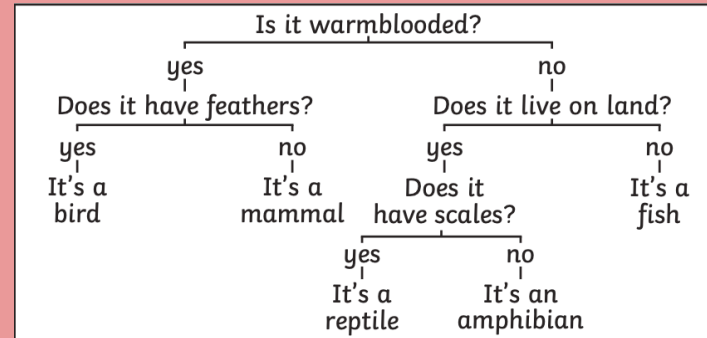
PLANTS

Flowering and Non-Flowering Plants

Plants can be sorted based on whether they are flowering or non-flowering. Flowering plants use flowers to produce seeds at some point in their life cycle, whereas non-flowering plants reproduce using cones, spores and fragmentation.

CLASSIFICATION

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



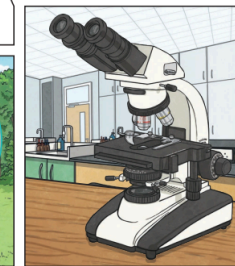
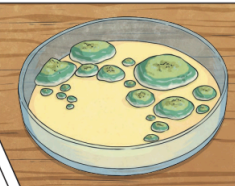
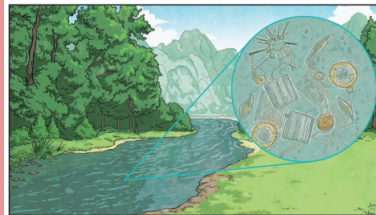
Domain: Eukarya
Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Carnivora
Family: Canidae
Genus: Canis
Species: Lupus

MICROORGANISMS

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.



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

ADDITIONAL VOCABULARY

annelid	echinoderm	archnid	virus	vertebrate	exoskeleton
crustacean	mollusc	bacteria	fungi	invertebrate	hydrostatic skeleton