

Science is the study of the physical and natural world through the testing of theories.

Y4 Science Knowledge Organiser: How can we classify animals and plants?

Biology

What should I already know?

- Differences between things that are living, dead and never been alive.
- Most living things live in habitats that best suit their needs
- The main animal groups are mammal, amphibian, reptile and bird.
- Animals are either vertebrates or invertebrates.
- Trees are either deciduous or evergreen.

FUN FACTS!

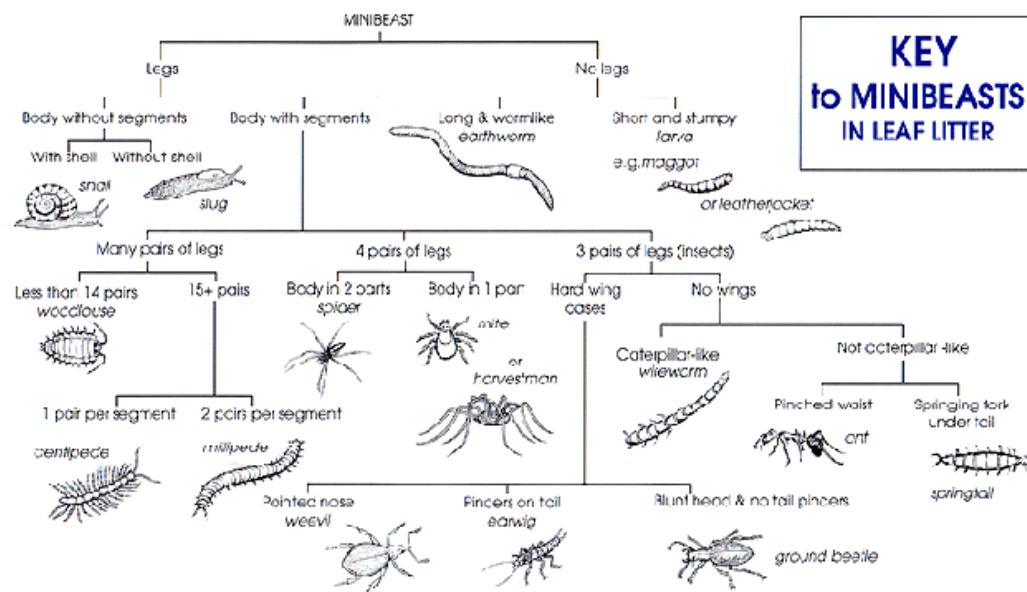
- There are 41,415 endangered species in the world. 13,306 of these are threatened with extinction.
- 10 of the most endangered species: Giant Panda, Tiger, Whooping crane, Blue whale, Asian Elephant, Sea otter, Snow leopard, Gorilla, Tasmanian Devil, Orangutan
- Environments change all the time (e.g. leaves falling from trees in Autumn). Some changes happen over a long time period.

Key Vocabulary and Definitions








classify	To arrange or group things into categories depending on characteristics.
vertebrate	an animal with a backbone.
invertebrate	an animal without a backbone.
sample	a small amount of something to show what the whole of it may be like.
exoskeleton	an external covering of the body found in some invertebrates such as arthropods.
habitat	place where an organism makes its home.
hibernate	to become inactive or dormant
amphibian	cold-blooded vertebrate animal
reptile	vertebrate animal with scaly skin and typically lay soft-shelled eggs on land.
mammal	warm-blooded animal with fur/hair, give birth to live young.
endangered	at risk of extinction.

What will I know by the end of this unit?







- Classify plants in flowering and non-flowering plants
- Classify vertebrates into fish, amphibians, birds, fish and mammals
- Classify non-vertebrates into insects, arachnids, molluscs.
- Know invertebrates are animals which do not have a backbone, vertebrates do.
- Know that a classification key is a tool for identifying and grouping based on differences



Invertebrates and Vertebrates

Invertebrates (Animals without a backbone)	Vertebrates (Animals with a backbone)
   	  

Deciduous and Evergreen

Deciduous (Loses leaves after growing season)	Evergreen (Stays green all year)
 Maple	 Oak
 Elm	 Palm
	 Holly
	 Spruce

