

Year 6 Subject Knowledge Organiser – Living things and their habitats

What I should already know

I can recognise that living things can be grouped in a variety of ways.

I can use classification keys to help group, identify and name a variety of living things in local & wider environment.

I can recognise that environments can change and that this can sometimes pose dangers to living things

What I will have learnt by the end of the unit

I can describe the difference in the life cycles of a mammal, an amphibian, an insect and a bird.

I can describe the life process of reproduction in some plants and animals.

I can describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals.

I can give reasons for classifying plants and animals based on specific characteristics.

Key Concepts

Biology

Chemistry

Physics

Scientific enquiry

Science for the future

Vocabulary

What I will have learnt at the end of the key stage

I will be able to describe the difference in the life cycles of a mammal, an amphibian, an insect and a bird.

I will be able to describe the life process of reproduction in some plants and animals.

I will be able to describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals.

I will be able to give reasons for classifying plants and animals based on specific characteristics.

Key skills I will learn/use

- Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals. ---Give reasons for classifying plants and animals based on specific characteristics.
- Living things can be grouped into micro-organisms, plants and animals.
- Vertebrates can be grouped as fish, amphibians, reptiles, birds and mammals.
- Invertebrates can be grouped as snails and slugs, worms, spiders and insects.
- Plants can be grouped as flowering plants and non-flowering plants.
- Using classification systems and keys.
- Identifying some animals and plants in the immediate environment.
- Researching unfamiliar animals and plants from a broad range of other habitats and decide where they belong in the classification system.

Opportunities for teaching diversity, equality (including protected characteristics and expanding cultural capital)

Get to meet a scientist! Explore people who use science in their jobs. I'm a Scientist, Get me out of here! – A super-curricular science outreach education & engagement activity (imascientist.org.uk) Science for Everyone (science4everyone.org)

Skills I may use for other subjects

Literacy- I can use my literacy knowledge to write about my findings.

Mathematics- I can use my knowledge carry out simple tests and record my findings using diagrams and graphs.

Key Vocabulary

Amphibian – A cold-blooded vertebrate animal that comprises frogs, toads, newts, salamanders and caecilians.

Annelid – A segmented worm.

Arachnid – An animal that has eight legs and a body formed of two parts.

Bird – A warm-blooded egg-laying vertebrate animal distinguished by the possession of feathers, wings, a beak and typically able to fly.

Crustaceans – Mostly live in water with a hard shell and segmented body.

Habitat – The natural home or environment of an animal, plant or other organism.

Insect – A small animal that has six legs and generally one or two pairs of wings.

Invertebrate – An animal lacking a backbone.

Mammal – A warm-blooded vertebrate animal, distinguishable by the possession of hair or fur, females secreting milk for young and typically giving birth to live young.

Microorganism – A microscopic organism, especially a bacteria, virus or fungus.

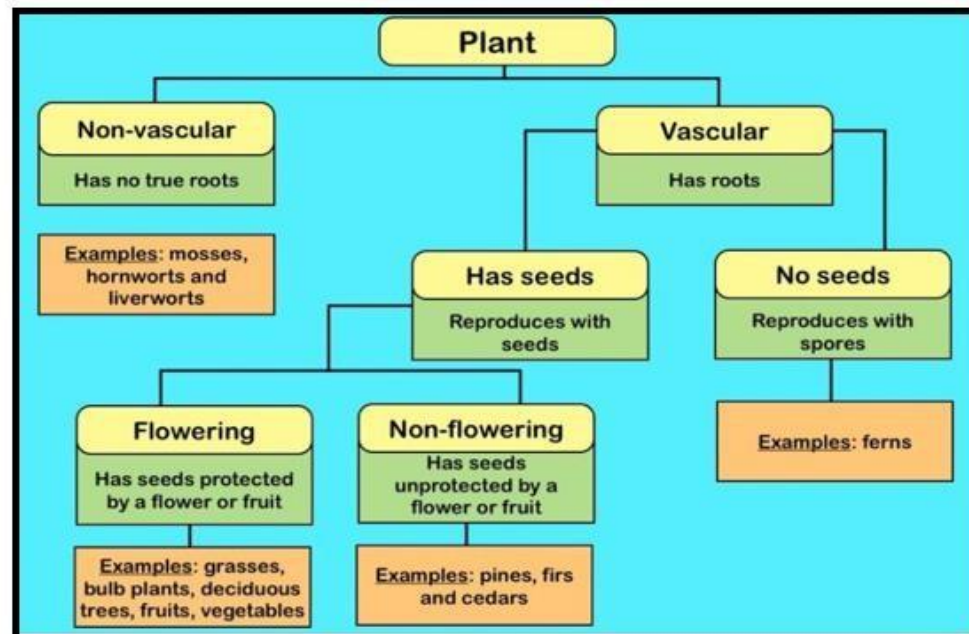
Reptile – A vertebrate animal that has dry scaly skin and typically lay soft-shelled eggs on land.

Vertebrate – An animal with possession of a backbone/ spinal column.

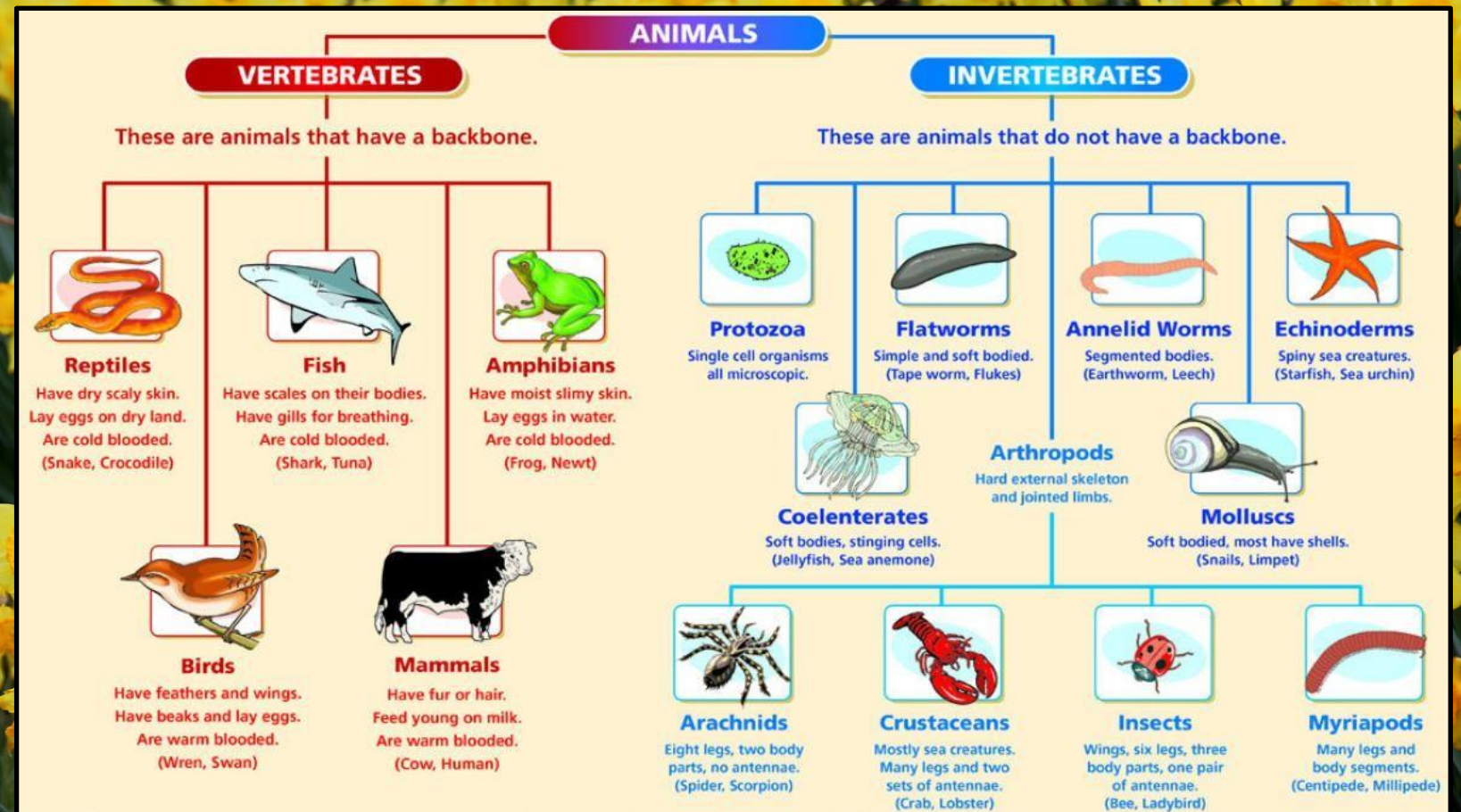
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Key Knowledge

Classification of Plants



Microorganisms are very tiny living things. They are so small that they are not visible to the naked eye, so a microscope is needed to see them. Microorganisms can be found all around us. They can live on and in our bodies, in the air, in water and on the objects around us. They can be found in almost every habitat on Earth.



Carolus Linnaeus is the father of taxonomy, which is the system of classifying and naming organisms. One of his contributions was the development of a hierarchical system of classification of nature. This system includes eight taxa: domain, kingdom, phylum, class, order, family, genus, and species.

Aristotle (384 - 322 BC) Philosopher and Scientist.