

Living things and their habitats: Classification

What I already know:

That animals can be grouped in a variety of ways. Classification keys are used to help group, identify and name living things.

Animals can be grouped into vertebrate and invertebrates. Plants can be grouped into flowering and non- flowering.

New knowledge:

In 1735, Swedish Scientist Carl Linnaeus first published a system for classifying all living things.

Living things are classified into broad groups according to common observable characteristics based on similarities and differences including micro-organisms plants and animals
The reasons for classifying plants and animals based on specific characteristics.

Use of more detailed classification. Broad groupings such as micro-organisms, plants and animals can be subdivided and discuss reasons why living things are placed in one group and not another.

Enquiry questions:

- How significant is the work of Carl Linnaeus and what is his classification system?
- How are vertebrates grouped based on their characteristics?
- What are classification keys and how can they be used to classify invertebrates?
- How do micro-organisms form part of the living things classification system?
- How are plants classified and identified?

Scientific skills:

Report and presenting findings from enquiries.
Make predictions and complete further investigation.
Plan and execute appropriate investigations based on a given or student-led question.
Take measurements, using a range of scientific equipment, with increasing accuracy and precision.
Use classification keys to identify animals.

Vocabulary:

vertebrates	Animals that have a backbone in their body. This includes fish, amphibians, reptiles, birds and mammals
invertebrates	Animals that don't have a backbone. They have either a soft body like worms or a hard outer casing like crabs.
fermentation	A process by which the microbes break down the complex sugars into simple compounds like carbon dioxide and alcohol.
microorganisms	A diverse group of minute, simple forms of life that are too small to be seen with the naked eye.
characteristics	The distinguishing features or property of something that we can use to help identify it.
organism	A single living thing.
taxonomy	The science of naming, describing and classifying organisms.
Protists/ protista	Single celled organisms that are not considered to belong to the animal, plant or fungi kingdoms – they include algae.
Fungi/ fungus	A simple organism that is neither a plant or an animal such as mushrooms and yeast.



Taxon	Human	Chimpanzee	Blue whale	Snake
Species	sapiens	troglodytes	musculus	naja
Genus	Homo	Pan	Balaenoptera	Naja
Family	Hominidae	Hominidae	Balaenopteridae	Elapidae
Order	Primates	Primates	Artiodactyla	Squamata
Class	Mammalia	Mammalia	Mammalia	Reptilia
Phylum	Chordata	Chordata	Chordata	Chordata
Kingdom	Animalia	Animalia	Animalia	Animalia



Setting up tests



Recording data



Observing and measuring



Making predictions



Asking questions



Interpreting and communicating results



Evaluating