

Year 6 – Living Things and their Habitats – Nature Library

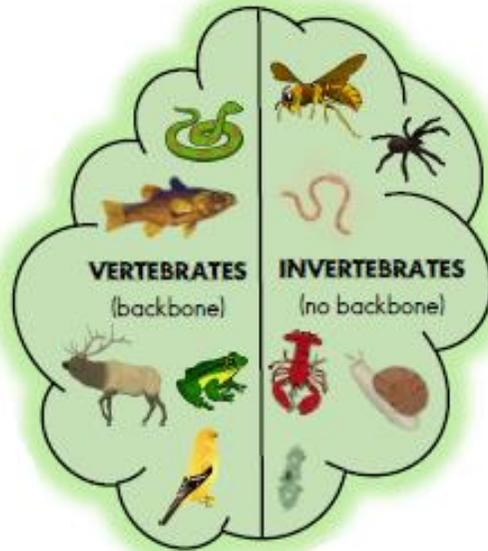
<p><u>What it looked like last year</u></p> <ul style="list-style-type: none"> Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. Describe the life processes of reproduction in some plants and animals. 	<p><u>What it looks like next year</u></p> <ul style="list-style-type: none"> Reproduction in humans, including the structure and function of the male and female reproductive systems, menstrual cycle, gametes, fertilisation, gestation and birth, to include the effect of maternal lifestyle of the foetus through the placenta. Reproduction in plants, including flower structure, wind and insect pollination, fertilisation, seed and fruit formation and dispersal, including quantitative investigation of some dispersal mechanisms. Differences between species.
<p><u>Vocabulary (definitions)</u> vertebrates - animals that have a backbone invertebrates – animals that don't have a backbone. fish amphibians reptiles birds mammals insects spiders snails worms flowering & non-flowering</p>	<p><u>Sequence of Learning</u></p> <ol style="list-style-type: none"> To demonstrate the understanding of the process of classification by inventing their own system based on characteristics. To apply the process of classification to plants. To group and classify vertebrates and invertebrates. To apply classification concepts to living things in the school grounds. To recognise that micro-organisms are groups of living things and explain what they are. Set up an investigation to observe how micro-organisms grow and multiply over time.
<p style="text-align: center;"><u>Cultural Capital</u></p> <ul style="list-style-type: none"> To 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. To be able to give reasons for classifying plants and animals based on specific characteristics. The real life knowledge that links is: using secondary sources for research, grouping & classifying, observing over time. The jobs it can be used in are: Biologist, Horticulture, Entomologist, Herpetologist. 	
<p><u>Principles of Teaching Science.</u> Exploring – when we look at how things work in the world Questioning – when we question what will happen</p>	

Year 6 – Living Things and their Habitats – Nature Library

Understanding – when we use scientific language to explain

Investigating – when we can explore and are hands on

Predicting – when we use our previous knowledge to say what we think will happen.



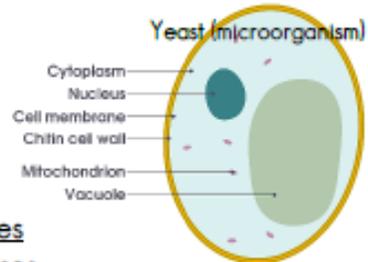
In about 350 B.C.
Aristotle (a
Greek
philosopher)
classified all
things into 4 main
groups.



Carl Linnaeus then simplified the naming of living things in 1735. Names of living things were often very long so he gave them a two-part (binomial) name. It was a mixture of genus and species (and in Latin) e.g. Human was *Homo Sapien*, Wolf was *Canus Lupus* and Lion was *Felis Leo*.



Year 6 – Living Things and their Habitats – Nature Library



3 Types

- Viruses
- Bacteria
- Fungus

Microorganisms

If you can only see a living thing with a microscope, it means it is a microorganism. These are found everywhere. Some of them, like yeast are helpful whilst some of them are harmful and disease causing, like bacteria. It is important to know how to avoid spreading the bad ones. (Wash your hands!)