Year 6 Science Spring 1 : Animals & Their Habitats

What I have learnt already…

Animals can be grouped into carnivores, herbivores and omnivores. They can also be grouped into vertebrates and invertebrates. • Organisms can be classified and we can use a classification key to identify them. • Examples of habitats (including microhabitats) and the organisms that can be found there. • Living things depend on each other to survive. • How environments are changing. • The relationships between predators and prey. • Food chains demonstrate the direction in which energy travels. • How organisms have adapted and evolved over time.

Key Knowledge

Micro-organisms

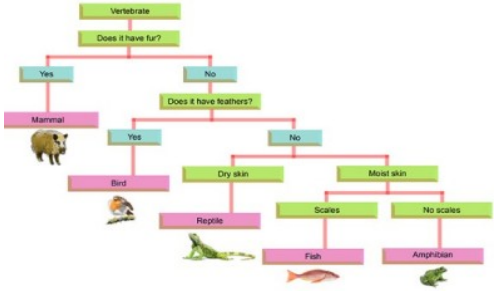
Microorganisms are very tiny living things. They are so small that they are not visible to the naked eye, so a microscope is needed to see them. Microorganisms can be found all around us. They can live on and in our bodies, in the air, in water and on the objects around us. They can be found• Examples of microorganisms include dust mites, bacteria and fungi, such as mould. • Some

Key Vocabulary

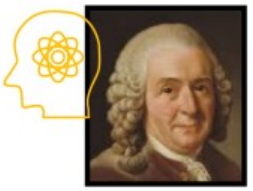
algae	**A single or multi-cellular organism that has no roots, stems or leaves and is often found in water**
bacteria	**Tiny little organisms that are everywhere around us.**
classification	**The arrangement of organisms into orderly groups based on their similarities and presumed evolutionary relationships.**
fungi	**A classification or group of living organisms. This means they are not animals, plants, or bacteria.**
invertebrate	**An invertebrate animal does not have a backbone and 97% of creatures belong to this group.**
micro-organism	**An organism which is microscopic, making it too small to be seen by the human eye.**
organism	**An individual animal, plant or singlecelled life form.**
species	**A group of closely related organisms that are very similar to each other and are usually capable of producing offspring.**
taxonomy	**The science of naming, identifying and classifying organisms.**
vertebrate	**A vertebrate animal is one that has a backbone.**
virus	**A small infectious agent that replicates only inside the living cells of an organism.**

What will I know by the end of this unit?

Living things can be grouped according to different criteria (where they live, what type of organism they are, what features they have). For example, a camel can belong in a group of vertebrates, a group of animals that live in the desert, and a group of animals that have fourlegs. • A classification key is a tool that is used to group living things to help us identify them using recognisable characteristics.



Carolus Linnaeus (1707-1778) Father of Classification



microorganisms can be helpful in certain situations. Others can be harmful, and their spread needs to be controlled or contained. in almost every habitat .

Key Questions

What are microorganism?

Which type of microorganism is unusual and why are scientists disagreeing whether it should be classed as a microorganism or not?

What is the name given to scientists who sort and classify living things into groups?
How can you stop food from going mouldy?

Year 6 Expectations

• Sort vertebrate and invertebrate animals into groups, describing their key features. Use a classification key to identify which group of vertebrates animals belong to and then create your own. • Explore the different ways in which invertebrates can be classified (e.g. arachnids, insects, molluscs). • to create a branching classification key. • Sort scenarios where microorganisms might be helpful (e.g. yeast in baking) or harmful; (e.g. infectious diseases). • Use classification systems and keys to identify some organisms in the immediate environment. Record these in a variety of ways (e.g. Venn and Carroll diagrams, tables). • Research unfamiliar organisms from a broad range of other habitats and decide where they belong in the classification system. To carry out investigations how food is preserved to stop it from going mouldy. • Research the work of famous scientists.

Thinking Skills