

Year 6 – Living Things and Their Habitats

Autumn 1 Knowledge Organiser

This Science unit follows on from previous studies of living things and their habitats in Year 4. This unit will deepen the children's understanding of classifying organisms based on similarities and differences. They will learn about the importance of classification and how we use classification keys. The children will also learn about microorganisms, including viruses, bacteria, fungi and yeast. They will be able to recognise examples of helpful and harmful microorganisms.

Key Knowledge

- Taxonomists classify living things into categories based on similarities and differences.
- Carl Linnaeus was a Swedish Scientist that first published a system for classification. We now use an adapted version, The Linnaeus System.
- The number of organisms in each group gets smaller until just one type of animal in the species group.
- Scientists are able to observe and understand characteristics of living things more clearly.
- Microorganisms can be found all around us. They can be found in almost every habitat on Earth.



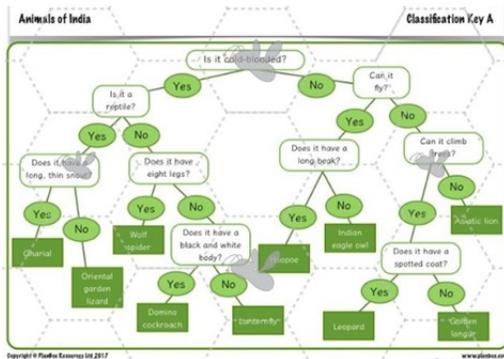
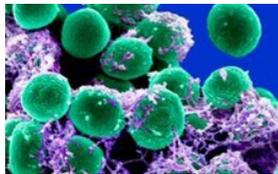
Key Vocabulary

- The Linnaeus System:** Adapted version of a system for classifying all living things developed first by Carl Linnaeus.
- Classification key:** A series of questions used to identify a living thing or decide which group it belongs to.
- Microorganisms:** Tiny living things that are not visible to the naked eye.
- Virus:** Example of a microorganism.
- Bacteria:** Example of a microorganism.
- Fungi:** Example of a microorganism.
- Yeast:** Microscopic fungus used to raise bread.
- Phytoplankton:** Example of a microorganism in fresh or sea water.

A virus:



A bacteria:



Helpful microorganisms:

- Bacteria used to ferment milk in cheese making.
- Yeast ferments carbohydrates in grapes to make wine.
- Microorganisms feed on leaves/plants to create compost.

Harmful microorganisms:

- Food poisoning caused by bacteria on undercooked food.
- The influenza virus causes flu symptoms.
- Athlete's foot is caused by a fungus that grows between the toes.

Key Questions

- What is a taxonomist?
- What is the Linnaeus system? How does it work?
- What is a classification key? How does it work? Explain an example of a classification key.
- What are microorganisms? Can you give examples of microorganisms?
- How are microorganisms helpful?
- How are microorganisms harmful?