Year 6:Living Things and Their Habitats

Key Question: Can I organise living things using classification systems?

Key Vocabulary

Characteristics Special qualities or appearances that make an individual or group of things different to others.

Classify To sort things into different groups.

Key A key is a series of questions about the characteristics of living things. A key is used to identify a living thing or decide which group it belongs to by answering 'yes' or 'no' questions.

Bacteria A single-celled microorganism.

Microorganism An organism that can only be seen using a microscope, e.g. bacteria, mould and yeast.

Microscope A piece of equipment that is used to view very tiny (microscopic) things by magnifying their appearance.

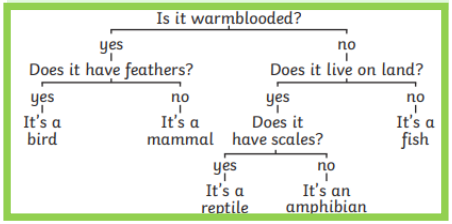
Species A group of animals that can reproduce to produce fertile offspring.

Working Scientifically

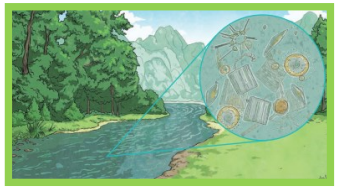
- Use appropriate scientific language .
- Ask questions about scientific phenomena and select the most appropriate ways to answer, recognising and controlling variables where necessary.
- Describe and evaluate scientific ideas using evidence from a range of sources.
- Use a range of scientific equipment to take accurate and precise measurements or readings.
- Record data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- Draw conclusions, explain and evaluate their methods and findings, based on their data and observations.
- Raise further questions for investigations, based on data and observations.

Key Knowledge

Scientists, called Taxonomists sort and group living things according to their similarities and differences.

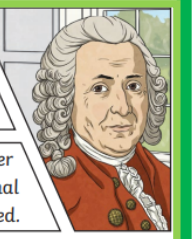


Helpful Microbes	Harmful Microbes
Bacteria - cheese	Bacteria - salmonella is a bacterium that can lead to food poisoning.
Yeast - wine	Virus—chicken pox and flu are examples of viral diseases.
Bacteria - yoghurt	Fungi - athlete's foot.
Yeast - bread dough	Bacteria - plaque
Penicillium fungi- antibiotics	Fungi - mould



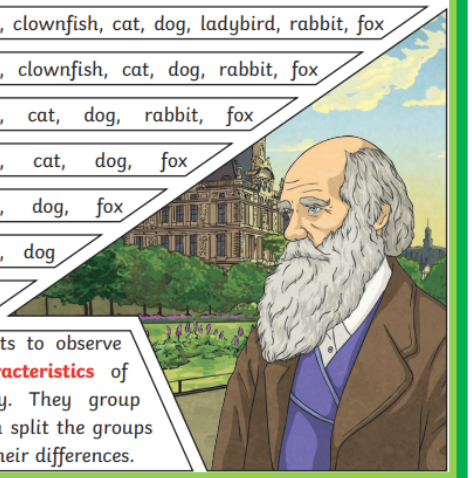
Classification

In 1735, Swedish Scientist Carl Linnaeus first published a system for **classifying** all living things. An adapted version of this system is still used today: The Linnaeus System.



Living things can be **classified** by these eight levels. The number of living things in each level gets smaller until the one animal is left in its species level. This is how a dog would be classified.

Domain: Eukarya	jackal, clownfish, cat, dog, ladybird, daisy, rabbit, fox
Kingdom: Animalia	jackal, clownfish, cat, dog, ladybird, rabbit, fox
Phylum: Chordata	jackal, clownfish, cat, dog, rabbit, fox
Class: Mammalia	jackal, cat, dog, rabbit, fox
Order: Carnivora	jackal, cat, dog, fox
Family: Canidae	jackal, dog, fox
Genus: Canis	jackal, dog
Species: Lupus	dog



Each group allows scientists to observe and understand the **characteristics** of living things more clearly. They group similar things together then split the groups again and again based on their differences.

Microorganisms are viruses, bacteria, moulds and yeast. Some animals (dust mites) and plants (phytoplankton) are also microorganisms.

Microorganisms are very tiny living things that can only be seen using a microscope. They can only be found in and on our bodies, in the air, in water and objects around us.