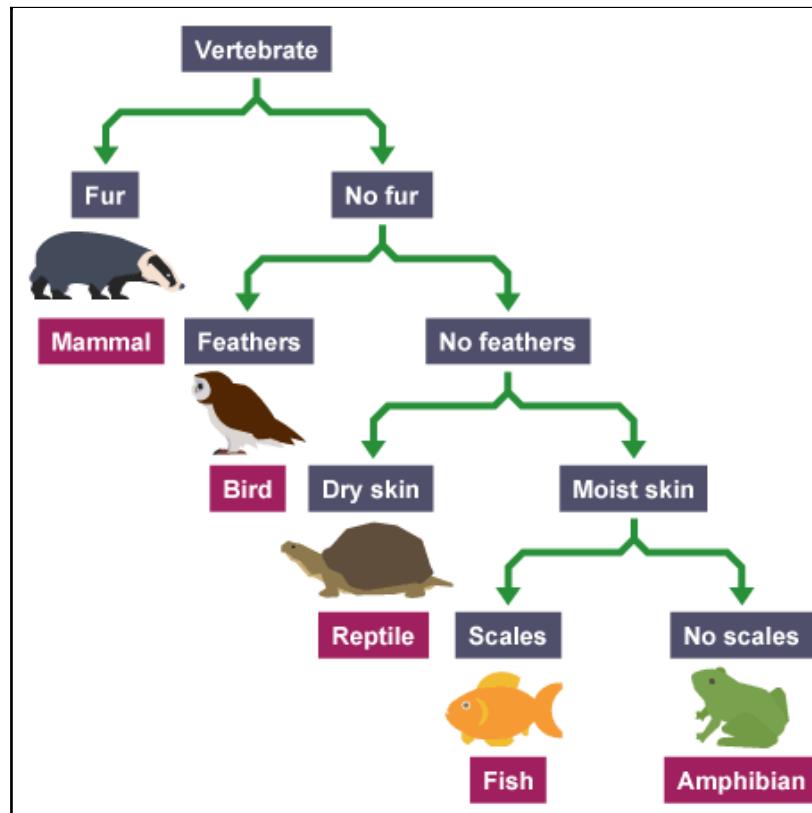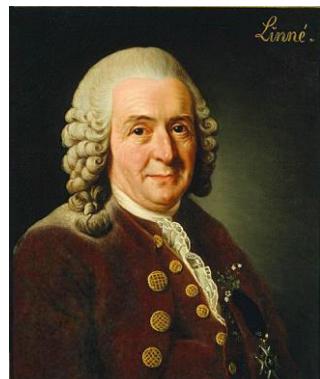KWPS

# How and why do scientists classify living things into different groups?

## ESSENTIAL VOCABULARY

| | |
|---|---|
| Classification | Grouping living things based on shared characteristics. |
| Microorganism | A tiny living organism that can only be seen with a microscope. |
| Vertebrate | An animal with a backbone. |
| Invertebrate | An animal without a backbone. |
| Species | A group of living things that can reproduce and have offspring. |
| Characteristic | A feature of quality used to identify and group living things. |



## Key Concepts

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| All living things can be grouped based on their observable features. |
| Classification helps scientists to study, understand and identify organisms. |
| Microorganisms, plants and animals are the three main groups in classification. |
| Animals can be split into vertebrates and invertebrates based on their skeletons. |
| Plants can be grouped by features such as flowering or non-flowering. |
| Scientific classification uses a system of groups such as kingdom, class, genus and species. |

## Scientist

Carl Linnaeus – a Swedish scientist who lived in the 1700s. He is known as the "father of modern taxonomy" because he created a system for naming and grouping all living things. Linnaeus organised plants and animals into categories based on their physical characteristics, which helped scientists understand how living things are related.

## What I will know at the end of the unit.

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|---|---|
| That living things are grouped based on similarities and differences. | |
| The key characteristics of mammals, reptiles, birds, amphibians, fish and invertebrates. | |
| That microorganisms are living things, and some are helpful while others are harmful. | |
| How to use classification keys to group and identify living things. | |
| That Carl Linnaeus created the first widely used system of classification still used today. | |