

Nova's Nature Explorers: Classifying Living Things

Learning objective: To recognize that living things can be grouped in a variety of ways and to explore the characteristics of vertebrates and invertebrates.

Read the front of each flashcard to identify the key term or question. Flip to the back (the answer) to check your understanding of how scientists classify the natural world. Use these to test your knowledge with a partner.

What is a vertebrate?

A vertebrate is an animal that possesses a backbone or spinal column.

What is an invertebrate?

An invertebrate is an animal that does not have a backbone, such as an insect, snail, or spider.

Which group of vertebrates gives birth to live young and feeds them milk?

Mammals.

What are the two main groups used to classify animals?

Vertebrates and Invertebrates.

Name a key characteristic that distinguishes birds from reptiles.

Birds have feathers and lay hard-shelled eggs, whereas reptiles typically have dry, scaly skin.

What is classification?

Classification is the process of sorting living things into groups based on their shared similarities and differences.

Describe the lifecycle of an amphibian.

Amphibians usually start their life in water breathing through gills, then develop lungs to live on land as adults.

Are all insects invertebrates?

Yes, all insects are invertebrates because they have an exoskeleton rather than an internal backbone.

What do we call a scientist who studies living things?

A biologist.

How do fish differ from mammals in the way they breathe?

Fish use gills to extract oxygen from water, while mammals use lungs to breathe air.