

Nova's Classification Key Challenge

Learning objective: To understand how to identify and group living things using a classification key.

Use these flashcards to test your knowledge of how scientists organize the natural world. Read the front of the card, think of the answer, and then check your response against the answer provided.

What is a classification key?

A tool used to identify living things by asking a series of 'yes' or 'no' questions about their characteristics.

What is the difference between a vertebrate and an invertebrate?

A vertebrate has a backbone, whereas an invertebrate does not have a backbone.

When using a key, what happens after you answer 'yes' or 'no' to a question?

You follow the branch of the key that leads to either the next question or the name of the living thing.

Nova the owl is a vertebrate. Does she have a backbone?

Yes, because she is a vertebrate.

Why do scientists use classification keys?

To help identify unknown plants or animals and to group similar living things together.

Give an example of a physical characteristic you might use in a key.

Examples include: does it have fur? Does it have wings? Does it have six legs?

If a creature has six legs, which group does it belong to?

It belongs to the insect group.

True or False: A classification key can only have two branches at each step.

True, because the questions must be answered with either 'yes' or 'no'.

What is a 'branch' in a classification key?

A branch is the path you follow on the diagram after answering a question.

If you are identifying a plant, what characteristic might you look at first?

You might look at whether it has flowers or no flowers.

Are spiders vertebrates or invertebrates?

Invertebrates, because they do not have a backbone.

Why is it important to be precise when observing an animal for a key?

To ensure you answer the questions correctly and identify the animal accurately.