

Classification Keys Challenge with Nova the Owl

Learning objective: To understand how to identify and classify living things using branched and table-based classification keys.

Use these flashcards to test your knowledge of how scientists group organisms. Read the front, think of the answer, then flip to check your understanding.

What is a classification key?	What is the main difference between a vertebrate and an invertebrate?
A tool used by scientists to identify living things by asking a series of questions with 'yes' or 'no' answers.	A vertebrate has a backbone or spinal column, while an invertebrate does not.
Nova the Owl asks: If a creature has feathers, what group does it belong to?	What do we call a specific feature, such as having six legs or fur, used to sort animals?
Birds.	A characteristic.
In a branching key, what happens after you answer a question?	True or False: Classification keys can be used for plants as well as animals.
You are directed to either another question or the final identification of the organism.	True.
Why do scientists use classification keys?	What is the term for a living thing, such as an animal, plant, or bacteria?
To help identify unknown organisms and organize them into groups based on their shared similarities.	An organism.
If you are using a key to identify an insect, what is one characteristic you might look for?	When creating a key, why is it important to use clear 'yes' or 'no' questions?
Having six legs (or three body parts).	To ensure there is no ambiguity and the user can always reach a definitive result.
What is the first step when starting to use a classification key?	If a key asks 'Does it have scales?', which group of animals are you likely trying to distinguish?
Observe the organism carefully to identify its physical features.	Fish or reptiles.