

Nova's Nature Classification Challenge

Learning objective: To be able to use and create classification keys to identify living things in the environment.

Use your knowledge of living things and the classification keys below to answer the following questions. Remember to look closely at the physical features of each creature.

Nova the owl has been out in the woods observing different creatures. She has started a classification key to help identify them. A classification key is a set of questions about the physical characteristics of living things. By answering 'yes' or 'no' to each question, you can eventually identify the specific creature. For example: Does it have a backbone? (Yes/No) -> Does it have feathers? (Yes/No).

Word bank: Classification · Key · Invertebrate · Vertebrate · Characteristic · Identification · Species

1. Nova finds a creature with six legs and a hard outer shell. Based on the rules of classification, explain why this creature is grouped as an invertebrate. (2 marks)

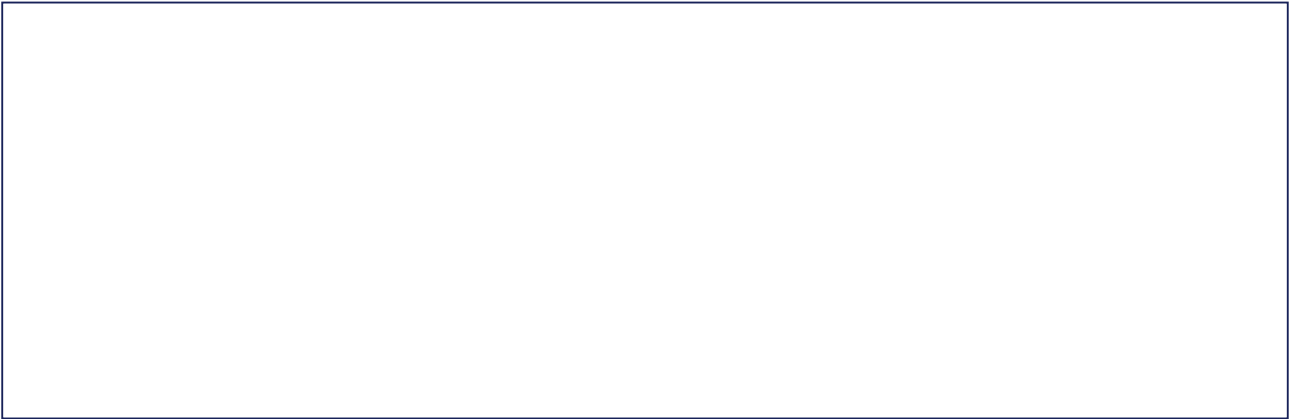
2. Create a simple 'Yes' or 'No' classification question that would help distinguish between a bird and a fish. (1 mark)

3. If a creature has fur and gives birth to live young, which class of vertebrate does it belong to? Give one other characteristic of this group. (2 marks)

4. Why is it important to use specific physical characteristics rather than opinions (like 'this animal looks friendly') when designing a classification key? (2 marks)

5. Look at a spider and an ant. Both have legs. Write one question that would effectively separate these two creatures in a classification key. (2 marks)

Draw: Draw a simple classification key that identifies three different garden creatures (e.g., a worm, a butterfly, and a sparrow). Use clear 'Yes' or 'No' branches for your questions.



Extension challenge: Nova wants to group local plants. Research the difference between flowering and non-flowering plants. Can you write two questions to help identify a fern compared to a rose bush?