

Class 4 Science Assessment: Classification Keys

Learning objective: To identify, name, and classify living things using a range of classification keys.

Read each question carefully. Use your scientific knowledge to identify characteristics and group living things. Write your answers clearly in the spaces provided.

Nova the barn owl has been observing the wildlife in the school meadow. She has found four creatures: a beetle, a frog, a sparrow, and a worm. To help her group them, she is creating a classification key based on their physical features.

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

1. Define the term 'classification' in your own words. Why do scientists use classification keys? (2 marks)

2. Look at the four creatures Nova found (beetle, frog, sparrow, worm). Which two are vertebrates? Explain your reasoning. (3 marks)

3. Create a simple 'Yes/No' question that could be the first step in a classification key to separate the frog from the worm. (2 marks)

4. Max the monkey is sorting animals by their diet. Explain the difference between a herbivore, a carnivore, and an omnivore. Give one example of each. (3 marks)

5. Bea the honeybee is looking at how we classify plants. List two characteristics you would look for to help classify a plant as a 'flowering plant'. (2 marks)

6. If you discovered a new, unknown creature in your garden, describe the scientific process you would use to classify it. Which features would you observe first? (5 marks)

7. Look at these three items: A stone, a sunflower, and a plastic toy. Explain why a scientist would not include all three in a classification key for living things. (3 marks)

8. How might a change in habitat (such as a pond drying up) affect the classification of the animals living there? (5 marks)

Draw: Draw a simple branching classification key that sorts these four items: A Dog, A Spider, A Goldfish, and A Butterfly. Use at least two different 'Yes/No' questions.

Extension challenge: Total: /25