

Classification Detectives with Nova and Bea

Learning objective: To be able to classify living things into broad groups according to observable characteristics and based on similarities and differences.

Read each question carefully. Use your scientific knowledge of the five kingdoms and classification systems to answer the questions below. Think about how Nova the owl and Bea the bee would observe these organisms in the wild.

Word bank: Vertebrates · Invertebrates · Micro-organisms · Amphibians · Reptiles · Mammals · Classification · Characteristics

1. Nova the owl is a bird. List two key characteristics that distinguish birds from other vertebrate groups, such as mammals or reptiles. (2 marks)

2. Bea the bee is an invertebrate. Explain why scientists classify bees as insects rather than arachnids. Mention the number of legs in your answer. (2 marks)

3. Look at these three organisms: a mushroom, a rose bush, and a frog. Which one belongs to the fungi kingdom? Explain one way you know it is not a plant. (2 marks)

4. Why is it useful for scientists to use a classification system when discovering new species in the rainforest? (2 marks)

5. Sort the following animals into the correct group: Salmon, Crocodile, Kangaroo, Newt. Use the labels: Mammal, Reptile, Fish, Amphibian. (4 marks)

Draw: Draw a 'Classification Tree' that shows how you would sort a cat, a beetle, a fern, and a goldfish into different groups. Label each branch with the reason for your choice.



Extension challenge: Research Carl Linnaeus. Write three sentences explaining why his system of naming and classifying living things is still used by scientists today.