

Nova's Guide to Habitats and Adaptation

Learning objective: To understand how living things are classified into broad groups according to common observable characteristics and how they are adapted to suit their environment.

Read the text carefully and answer the questions below using full sentences. Pay close attention to how specific features help animals survive.

Nova the barn owl loves to observe the natural world from her favourite tree. She explains that a habitat is the natural home of an organism, providing everything it needs to survive: food, water, and shelter. Every living thing has developed special adaptations to thrive in its environment. For instance, consider the arctic fox, whose thick white fur acts as camouflage against the snow, keeping it warm and hidden from both prey and predators. In contrast, creatures living in the desert, such as the fennec fox, have large ears to help release body heat and keep them cool. Scientists classify living things based on shared characteristics. While a shark and a dolphin might look similar because they both swim, they belong to different groups: sharks are fish, while dolphins are mammals. Understanding these adaptations is crucial because if an environment changes too quickly, such as through deforestation or climate shifts, many organisms may struggle to survive. Nova reminds us that protecting these diverse habitats ensures that every creature, from the smallest insect to the largest mammal, has a place to call home.

Word bank: adaptation · environment · classify · organism · characteristics · predator · camouflaged

1. According to the text, what are the three essential things a habitat must provide for an organism? (2 marks)

2. What is the primary difference in how arctic foxes and fennec foxes adapt to their respective temperatures? (2 marks)

3. Why might a scientist have difficulty classifying a shark and a dolphin if they only looked at their physical appearance? (2 marks)

4. What does the text imply happens to animals when their environment undergoes rapid, negative changes? (2 marks)

5. Nova suggests that protecting habitats is important. Do you agree with this statement? Give a reason for your answer. (2 marks)

Draw: Draw two different animals in their natural habitats. Label at least two 'adaptations' for each animal (e.g., sharp claws for climbing, thick fur for warmth) and explain how these help them survive.



Extension challenge: Research a local habitat near your school, such as a pond, woodland, or park. List three organisms found there and identify one specific adaptation each has that helps it survive in that local area.