

Exploring Habitats with Nova the Owl

Learning objective: To identify how animals and plants are adapted to suit their environment in different habitats and to understand how these environments can change.

Read each question carefully and use your scientific knowledge to provide detailed answers. Remember to explain the 'why' behind your observations.

Nova the owl is observing different environments from high above. Whether it is a dense woodland, a cold pond, or a dry grassland, every living thing has specific features that help it survive in its unique home. Think about the animals and plants you have studied and how they fit into their surroundings.

Word bank: adaptation · environment · classification · predator · prey · micro-habitat · camouflage · ecosystem

1. Nova observes a polar bear in the Arctic. Explain two physical adaptations the polar bear has that allow it to survive in such a cold environment. (2 marks)

2. Define the term 'micro-habitat' and provide one example of a micro-habitat you might find in a typical school playing field. (2 marks)

3. Why is camouflage an important adaptation for both predators and prey? Give one example of an animal that uses camouflage to survive. (2 marks)

4. If a woodland habitat was cleared to build a road, what might happen to the local food chain? Describe one potential consequence for a species living there. (2 marks)

5. Classification is key to understanding habitats. If you found a new creature with gills and fins, which habitat would you expect it to belong to and why? (2 marks)

Draw: Draw a diagram of a pond habitat. Label at least three living things and identify one adaptation for each that helps it live in or near the water.



Extension challenge: Research a desert plant, such as a cactus. Write a short paragraph explaining how its roots and leaves have adapted to help it store water in an environment where rainfall is very rare.