

Nova's Habitat Expedition: Sorting and Survival

Learning objective: To recognize that living things can be grouped in a variety of ways and explore how environmental changes can pose dangers to specific habitats.

Nova the owl has been observing different ecosystems. Use the word bank to sort the animals and plants into their correct habitats. Then, use your scientific knowledge to answer the questions about how these creatures are adapted to their homes.

Word bank: Arctic Tundra · Tropical Rainforest · Deciduous Woodland · Polar Bear · Toucan · Bluebell · Lichen · Orchid · Reindeer

1. Choose one animal from the word bank and justify why its physical features (adaptations) make it suited to its specific habitat. Explain why it would struggle to survive if it moved to a different habitat on this list. (3 marks)

2. Compare and contrast the Arctic Tundra and the Tropical Rainforest. What are the two biggest environmental differences that living things must adapt to in these regions? (2 marks)

3. What might happen to the animals in the Deciduous Woodland if the trees were removed to build a large car park? Explain your reasoning. (3 marks)

4. Lichen grows on trees in the Deciduous Woodland. If the air becomes polluted, lichen often disappears. Why is this a useful sign for scientists observing the health of a habitat? (2 marks)

5. A farmer decides to plant non-native species in a local woodland. Justify why this might be a problem for the native plants, such as bluebells, that already live there. (3 marks)

6. If the global temperature rises, the ice in the Arctic Tundra will melt. Explain the potential impact on the food chain for a predator like the polar bear. (3 marks)

Draw: Draw a 'micro-habitat' you might find in your own school playground (e.g., under a log, in a patch of long grass, or near a damp wall). Label three living things you might find there and one non-living thing that helps them survive.



Extension challenge: Design a brand new creature that is perfectly adapted to a 'Floating City' habitat. Write a short paragraph explaining three specific body parts your creature has and exactly how those parts help it find food or stay safe in its environment.