Nova’s Habitat Expedition: Year 5 Science Flashcards

Learning objective: To identify, describe, and compare the characteristics of various habitats and understand how living things are adapted to survive within them.

Use these flashcards to test your knowledge of habitats and adaptation. Nova the owl suggests reading the front, attempting to define the term, and then checking the answer on the back.

What is a habitat?

A habitat is the natural home or environment of an animal, plant, or other organism, providing the specific conditions they need to survive.

Define the term 'adaptation'.

Adaptation is a change or the process of change by which an organism or species becomes better suited to its environment.

What is a micro-habitat?

A micro-habitat is a very small, specific area within a larger habitat that has its own unique conditions, such as under a rotting log or inside a stone wall.

Explain why a cactus is well-adapted to a desert habitat.

A cactus has thick, fleshy stems to store water and spines instead of leaves to reduce water loss and protect it from thirsty animals.

What does 'biodiversity' mean?

Biodiversity is the variety of different species of plants and animals living within a particular habitat or ecosystem.

Compare and contrast a polar habitat with a tropical rainforest.

A polar habitat is extremely cold with limited vegetation, whereas a rainforest is warm and wet with high levels of biodiversity.

Justify why it is important for humans to protect natural habitats.

Protecting habitats ensures the survival of diverse species, maintains stable ecosystems, and preserves the natural resources that all living things rely on.

What might happen if a predator is removed from its ecosystem?

The population of its prey might increase rapidly, leading to overgrazing or the depletion of food sources, which could eventually destabilise the entire habitat.

Define 'nocturnal' and explain its benefit in some habitats.

Nocturnal animals are active at night. This is an adaptation to avoid the heat of the day or to hunt when competitors are less active.

Explain the role of a producer in a food chain.

A producer, usually a plant, creates its own energy using sunlight through photosynthesis, forming the base of the food chain.