Nova's Adaptation Expedition

Learning objective: To understand how living things are adapted to suit their environment in different ways.

Read the front of the card to test your knowledge about how plants and animals adapt to survive. Flip the card to check your answer.

What is an adaptation?

An adaptation is a special feature or behaviour that helps a living thing survive and reproduce in its environment.

Why do polar bears have thick layers of blubber?

To provide insulation and keep them warm in freezing Arctic temperatures.

How does camouflage help a predator like a snow leopard?

It allows the leopard to blend into its snowy surroundings, making it harder for prey to spot it before it pounces.

Give one example of how a desert plant, like a cactus, is adapted to its habitat.

It has succulent stems to store water, or spines instead of leaves to reduce water loss.

What is the difference between a structural adaptation and a behavioural adaptation?

A structural adaptation is a physical feature (like sharp claws), whereas a behavioural adaptation is an action or way of acting (like migrating).

Why do many birds migrate to warmer countries during winter?

To find food and avoid harsh weather conditions that make survival difficult in their home habitat.

What are 'inherited traits'?

Characteristics that are passed down from parents to their offspring through their genes.

How do the webbed feet of a duck help it survive?

They act like paddles to help the duck swim efficiently through water to find food.

Why do some flowers have bright colours and strong scents?

To attract pollinators like insects, which helps the plant reproduce.

What happens if a species is not well-adapted to its changing environment?

It may struggle to find food or shelter, which can lead to a decrease in its population or, in extreme cases, extinction.

How does a giraffe's long neck count as an adaptation?

It allows the giraffe to reach leaves high up in trees that other animals cannot reach, reducing competition for food.

True or False: Adaptations happen instantly when an animal moves to a new place.

False. Adaptations develop over many generations through the process of natural selection.