Nova's Autumn Science Flashcards

Learning objective: To identify and explain the seasonal changes in plants, animals, and day length during autumn in the UK.

Use these flashcards to test your knowledge of how the natural world changes as we transition from summer to winter. Nova the owl has gathered these facts to help you prepare for the colder months!

What does 'deciduous' mean in relation to trees?

Deciduous trees shed their leaves annually, usually in autumn, to conserve energy during the winter months.

What is the name of the green pigment that allows plants to absorb energy from sunlight?

Chlorophyll.

Why do leaves change colour from green to yellow, orange, or red in autumn?

As daylight hours decrease, trees stop producing chlorophyll, allowing other pigments (carotenoids and anthocyanins) to become visible.

What is the term for when animals, such as hedgehogs, enter a deep, sleep-like state to survive the winter?

Hibernation.

What is 'migration' in the context of birds in autumn?

The seasonal movement of birds from cooler regions to warmer climates to find food and better living conditions.

What happens to the length of daylight in the UK as we move through autumn towards winter?

The days become progressively shorter because the Earth's tilt causes the Northern Hemisphere to receive less direct sunlight.

What is the Autumnal Equinox?

The moment in September when day and night are approximately equal in length, marking the official start of astronomical autumn.

Why do many plants enter 'dormancy' in late autumn?

It is a survival strategy to save energy and protect the plant from freezing temperatures and lack of water.

How does the drop in temperature affect the speed of chemical reactions in cold-blooded animals?

Their metabolism slows down, making them less active and often leading them to seek shelter until the weather warms up.

What is one way that trees 'prepare' for winter before their leaves fall?

They withdraw nutrients from their leaves back into their branches and roots to store them for the spring.

In the UK, what is a common scientific reason for fungi appearing more frequently in autumn?

The increased rainfall and cooler, damp conditions provide the perfect environment for fungi to grow and release spores.

Why do some animals store nuts and seeds in autumn?

To create a food supply for the winter months when fresh vegetation and insects are scarce.