

Autumn: The Science of Change

Join Nova the Owl on an autumnal expedition—discover why the world transforms as the days grow shorter!

- **Why do deciduous trees shed their leaves during the autumn months to survive the coming winter?**
- **How does the tilt of the Earth on its axis influence the changing length of days as we transition into autumn?**
- **In what ways do animals like hedgehogs and squirrels prepare physiologically for the colder temperatures ahead?**
- **Explain the relationship between the reduction in solar energy and the metabolic rate of plants.**
- **What is the biological purpose of migration for bird species when autumn arrives in the Northern Hemisphere?**

Did you know? Did you know? As the daylight hours decrease, trees like the oak and beech stop producing chlorophyll—the green pigment used for photosynthesis. Without chlorophyll, the hidden colours of the leaves, such as brilliant yellows and oranges, are finally revealed before the leaves fall to the ground!

Key vocabulary: Deciduous · Chlorophyll · Photosynthesis · Hibernation · Migration · Equinox · Dormancy · Senescence