

Autumn Nature Investigator: A Report by Nova the Owl

Learning objective: To observe, record, and explain the seasonal changes in plants and animals as autumn arrives, in line with Year 4 science objectives.

Put on your explorer's coat and head outside! Use this template to record your scientific observations of the changing environment. Observe how plants, trees, and animals are preparing for the colder weather. Write in full, scientific sentences and use your best descriptive vocabulary.

Word bank: deciduous · evergreen · chlorophyll · dormancy · migration · adaptation · decomposition · photosynthesis

1. Tree Classification: Identify a tree near you. Is it deciduous or evergreen? Describe how its appearance has changed since the summer months. (3 marks)

2. The Colour Shift: Explain why the leaves of deciduous trees change colour and eventually fall to the ground. What is happening inside the leaf? (4 marks)

3. Animal Adaptations: Observe or research one animal that is preparing for winter. How does its behaviour change during the autumn? Justify why these changes are necessary for its survival. (4 marks)

4. Compare and Contrast: Compare the environment of a woodland area in mid-summer versus mid-autumn. What are the two most significant differences you notice? (3 marks)

5. Hypothesis: What might happen to the local food chain if autumn arrived two months earlier than usual? Explain your reasoning. (4 marks)

6. Scientific Reflection: How does the reduction in daylight hours affect the life cycle of the plants you have observed today? (3 marks)

Extension challenge: Create a detailed annotated sketch of a fallen leaf. Use your scientific knowledge to label the parts of the leaf and describe the process of decomposition you might see happening on the forest floor.