Autumn Nature Assessment

Learning objective: To identify seasonal changes in the environment and understand the life cycle of deciduous trees during autumn.

Read each question carefully. Use the word bank to help you with your spelling. Show your working where necessary.

Nova the owl is watching the forest change. As the days grow shorter and the temperature drops, the green leaves on the oak trees begin to turn shades of gold, orange, and brown before falling to the ground. Some animals are busy preparing for the cold winter months ahead.

Word bank: deciduous · chlorophyll · photosynthesis · dormant · migration · hibernate · nutrients

1. Nova notices that the leaves are changing colour. Explain why leaves change colour in the autumn. (Hint: Think about what happens to the green pigment in the leaf.) (2 marks)

2. Name two things that happen to trees in autumn to help them survive the winter. (1 mark each) (2 marks)

3. Why do some animals, like hedgehogs, choose to hibernate when the weather gets colder? (2 marks)

4. Max the monkey is looking at a pile of fallen leaves. He says, 'These leaves are just rubbish.' Using your scientific knowledge, explain why the leaves on the ground are actually useful for the soil. (3 marks)

5. Look at the list of animals below. Tick whether they migrate, hibernate, or stay active in the UK during autumn/winter:
- Swallow: _____
- Hedgehog: _____
- Squirrel: _____ (3 marks)

6. Compare the behaviour of a bird (like a swallow) to a mammal (like a dormouse) as the seasons change from autumn to winter. Why do they behave differently? (4 marks)

7. Write a short report (5 sentences) describing how the environment changes from late summer to late autumn. Include information about the weather, plants, and animal behaviour. (9 marks)

Draw: Draw a labelled diagram of a deciduous tree in autumn. Include labels for the leaves, the roots, and one animal that might be using the tree for shelter.

Extension challenge: Total: /25