

Autumnal Observations with Bea the Bee

Learning objective: To identify and describe the seasonal changes associated with Autumn and the life cycles of deciduous plants.

Follow the drawing prompt to create your scientific illustration. Once finished, use the word bank to label the key features of your autumnal scene.

Draw: Create a detailed scientific sketch of a woodland scene in late October. Include a large deciduous tree with some leaves still attached (in shades of gold, orange, and brown) and some leaves scattered on the ground. Draw Bea the bee resting near a hollow in the tree. Use a realistic, observational style. Include labels showing the process of leaves turning colour and the start of the tree's winter dormancy.



Label words: Deciduous tree · Chlorophyll · Photosynthesis · Dormancy · Photosynthetic pigment · Nutrient absorption · Decay

Steps:

1. Explain why deciduous trees lose their leaves during the autumn months. Consider the tree's need to conserve energy.
2. What happens to the green pigment (chlorophyll) in the leaves as the days get shorter?
3. Compare and contrast a deciduous tree in summer versus autumn. How does the rate of photosynthesis

change?

4. Justify why it is important for the fallen leaves to decompose on the forest floor.
5. What might happen if the temperature remained warm throughout the entire year for a deciduous tree?
6. Label your drawing to show where the 'Deciduous tree' is and where 'Decay' is occurring.