

Nova's Botanical Report: How Plants Function

Learning objective: To explain the functions of different parts of a plant and understand the requirements for healthy plant growth.

Use the prompts below to write a scientific report about plant life cycles and growth. Think about how Nova the owl would describe her observations from the forest canopy.

Plants are extraordinary living organisms that possess the remarkable ability to create their own energy through the process of photosynthesis.

Word bank: photosynthesis · transportation · nutrients · stomata · xylem · consequently · furthermore · in addition to · vital for

1. The Roots and Stem: Describe the function of the roots and the stem in a plant. Start your paragraph by saying: The roots play a crucial role by... (3 marks)

2. The Leaves: Explain how leaves capture sunlight and what role they play in gas exchange. Start your paragraph by saying: Leaves are essentially the power stations of the plant because... (3 marks)

3. The Flower and Reproduction: Detail how flowers are adapted for pollination. Start your paragraph by saying: The main purpose of a flower is to... (3 marks)

4. Requirements for Growth: Identify what a plant needs to remain healthy. Start your paragraph by saying: For a plant to thrive and grow, it requires several key factors including... (2 marks)

5. Conclusion: Summarise why plants are essential to life on Earth. Start your paragraph by saying: In conclusion, without the complex processes within plants, life would be... (2 marks)

Extension challenge: Research a specific plant species found in your local area. Write a short paragraph explaining one unique adaptation it has developed to survive in its specific habitat.