

Name _____

The Mysteries of Plant Behavior: Can They Perform Photosynthesis at Night?

Open-Ended Response Questions

1. Discuss the importance of photosynthesis and respiration in maintaining the energy balance of plants over a 24-hour cycle, emphasizing the roles of glucose and oxygen.
2. Explore the ecological advantages of CAM and C4 plant adaptations in specific environments, highlighting their contributions to plant survival and ecosystem diversity.
3. Imagine a world where plants could only perform photosynthesis during the day. How might this impact plant ecosystems, food chains, and the availability of oxygen?
4. Reflect on the ingenuity of plant adaptations in using available resources efficiently, and explain why these adaptations are essential for the overall health of ecosystems.

