

Name _____

The Backbone of Plant Growth: How Stems Support Plants

Open-Ended Response Questions

1. Discuss the importance of stem flexibility in plant adaptation to environmental factors, considering its role in withstanding wind and supporting heavy foliage.
2. Explore the concept of apical dominance and its significance in plant architecture, considering how it influences stem elongation and branching patterns.
3. Reflect on the ecological implications of stem architecture in plant communities, considering how differences in stem structure contribute to resource competition and species diversity.
4. Compare and contrast the growth patterns of herbaceous and woody stems, discussing how their differences reflect their respective life strategies and environmental adaptations.

