

Name \_\_\_\_\_

## Adapting to Change: How Woody Plants Respond to Environmental Challenges

### Open-Ended Response Questions

1. Discuss the significance of woody plants' ability to regulate their internal temperature, considering its impact on their survival in extreme environmental conditions such as heatwaves or cold snaps.
2. Evaluate the effectiveness of woody plants in mitigating pollution, considering their role in improving air and soil quality and reducing the impacts of human-induced pollutants on ecosystems.
3. Analyze the importance of genetic diversity in woody plant populations, considering its role in facilitating adaptation to changing environmental conditions and ensuring the long-term resilience of ecosystems.
4. Examine the various strategies employed by woody plants to cope with drought conditions, considering their physiological, anatomical, and behavioral adaptations for water conservation and survival.

