

Selecting Plants for Climate and Soil Conditions

Part 1: Dialogue

Olivia (Landscape Architect): Before finalizing our planting plan, we need to consider the **plant hardiness zone**. That will determine which species can survive in this climate.

Ethan (Colleague): Right. If we choose plants outside the **plant hardiness zone**, they might not thrive, especially in extreme temperatures.

Olivia: Exactly. We should also check the **soil pH balance**. Some plants require more acidic soil, while others do better in alkaline conditions.

Ethan: Good idea. Testing the **soil pH balance** will help us select plants that naturally adapt to the site's conditions without needing excessive soil amendments.

Olivia: Since this site has dry summers, we should prioritize **drought-tolerant species** to reduce water usage and maintenance costs.

Ethan: Agreed. **Drought-tolerant species** will ensure the landscape remains lush while minimizing irrigation needs.

Olivia: Let's also use **companion planting** to support plant health. Some species grow better together, improving pest resistance and soil nutrients.

Ethan: That's smart. **Companion planting** can enhance biodiversity and reduce the need for chemical fertilizers and pesticides.

Olivia: Finally, we should consider **seasonal interest**—making sure we have plants that provide color and texture year-round.

Ethan: Absolutely. Designing for **seasonal interest** will keep the landscape visually appealing in all seasons, not just in spring and summer.

Part 2: Comprehension Questions

1. Why is it important to consider the **plant hardiness zone** when selecting plants?
 - (A) It determines how much fertilizer a plant needs
 - (B) It helps control pests naturally
 - (C) It improves the visual appeal of a landscape
 - (D) It ensures plants can survive in the local climate
 2. How does **soil pH balance** affect plant selection?
 - (A) It influences which plants will thrive in the soil
 - (B) It determines the best time to plant trees
 - (C) It helps plants grow taller
 - (D) It eliminates the need for irrigation
 3. Why are **drought-tolerant species** beneficial in dry climates?
 - (A) They grow faster than other plants
 - (B) They require less water and maintenance
 - (C) They improve soil pH levels
 - (D) They prevent all plant diseases
 4. What is the purpose of **companion planting**?
 - (A) To encourage plants to change colors
 - (B) To attract more insects to the garden
 - (C) To improve biodiversity and natural pest control
 - (D) To make plants grow at the same rate
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Part 3: Vocabulary with Definitions

- **Plant hardiness zone (耐寒性ゾーン)** – A geographic area defined by climate conditions, indicating which plants can survive there.
- **Soil pH balance (土壌 pH バランス)** – The acidity or alkalinity of soil, affecting plant growth and nutrient availability.

- **Drought-tolerant species (耐乾性種)** – Plants that require minimal water and can survive in dry conditions.
 - **Companion planting (共生栽培)** – The practice of growing plants together to benefit growth, pest control, or soil health.
 - **Seasonal interest (季節の魅力)** – Designing landscapes to include plants that provide year-round color, texture, and visual appeal.
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Part 4: Answer Key

1. **Why is it important to consider the plant hardiness zone when selecting plants?**
☒ (D) It ensures plants can survive in the local climate
2. **How does soil pH balance affect plant selection?**
☒ (A) It influences which plants will thrive in the soil
3. **Why are drought-tolerant species beneficial in dry climates?**
☒ (B) They require less water and maintenance
4. **What is the purpose of companion planting?**
☒ (C) To improve biodiversity and natural pest control