

Name _____

Choosing the Right Fertilizer for Your Plants

Open-Ended Response Answer Key

1. The N-P-K ratio would vary for each plant:
 - Tomatoes: A balanced N-P-K ratio like 10-10-10 is suitable because it supports both fruiting and leafy growth.
 - Cucumbers: A higher nitrogen (N) ratio like 15-5-10 would promote lush vine and leaf growth.
 - Lettuce: A higher nitrogen (N) ratio like 20-10-10 is beneficial for robust leafy growth.
2. Reading and following fertilizer label instructions are crucial. Neglecting to do so could lead to over-fertilization, which can harm plants, disrupt soil health, and cause environmental pollution. Incorrect application rates or methods may also waste resources and money.
3. An example of an organic fertilizer is compost, which is made from decomposed organic matter. Compost enhances soil structure, enriches soil with nutrients, improves water retention, and encourages beneficial microbial activity. It is considered beneficial for both plants and the environment because it provides slow-release nutrients, reduces the need for chemical fertilizers, and promotes sustainable gardening practices that minimize environmental impact.

