

Name _____

The Underground Helpers: How Perennial Plants Boost Soil Health

Open-Ended Response Questions

1. Discuss the role of perennial plants in soil fertility and nutrient cycling. Provide examples of perennial plants that contribute significant amounts of organic matter to the soil and explain how this organic matter benefits soil health.
2. Reflect on the relationship between perennial plants and soil erosion prevention. Describe the characteristics of perennial plants that make them effective in stabilizing soil and reducing erosion risk, and discuss the importance of incorporating perennials into erosion control strategies.
3. Consider the environmental benefits of perennial plants in agriculture. Discuss how perennial crops can reduce the need for synthetic fertilizers and pesticides, enhance soil health and biodiversity, and mitigate the impacts of climate change through carbon sequestration.
4. Imagine you are advising a gardener on the benefits of incorporating perennial plants into their landscape design. Provide three reasons why perennial plants are valuable for maintaining healthy soils and sustainable gardens, considering factors such as soil conservation, biodiversity, and long-term ecosystem resilience.

