

Name _____

Guardians of the Earth: Exploring the Vital Functions of Ecosystems

Open-Ended Response Answer Key

1. Ecosystems are interconnected through processes such as nutrient cycling, energy flow, and species interactions, which collectively maintain Earth's environmental balance.
2. Deforestation can lead to increased greenhouse gas emissions, loss of habitat for countless species, disruption of water cycles, and soil erosion, with far-reaching consequences for biodiversity and climate stability.
3. Conservation efforts are essential for protecting ecosystem functions, preserving biodiversity, and ensuring the sustainability of natural resources for future generations.
4. Human activities such as deforestation, pollution, and habitat destruction can disrupt ecosystem functions, but strategies such as conservation, restoration, and sustainable resource management can help mitigate these impacts and promote ecosystem resilience.

