

Name _____

Oceanic Carbon Captains: The Role of Oceans in the Global Carbon Cycle

Open-Ended Response Answer Key

1. Challenges to the oceans' capacity as a carbon sink include ocean acidification, overfishing, and pollution. If the oceans cannot absorb as much carbon, there may be accelerated global warming and impacts on marine ecosystems.
2. Individuals and communities can protect oceans by reducing carbon emissions, supporting sustainable fishing and conservation efforts, and advocating for policies to combat climate change.
3. Artists like Ernst Haeckel can raise awareness of marine biodiversity and the carbon cycle through their artwork, helping people appreciate the intricate connections within ecosystems.
4. International cooperation and policies are crucial for addressing climate change and preserving the oceans' role in the carbon cycle. Collaborative efforts can lead to more effective mitigation and conservation strategies on a global scale.

