

Name _____

Unveiling the Greenhouse Effect: A Key Player in Climate Change

Open-Ended Response Answer Key

1. Human activities such as burning fossil fuels release large amounts of carbon dioxide (CO₂) and other greenhouse gases into the atmosphere, enhancing the greenhouse effect and leading to global warming and climate change. Deforestation also contributes to the intensification of the greenhouse effect by reducing the number of trees that can absorb CO₂ from the atmosphere.
2. Changes in weather patterns and extreme weather events are linked to the intensification of the greenhouse effect because rising global temperatures alter atmospheric circulation patterns, leading to shifts in precipitation, increased frequency of heatwaves, droughts, and storms.
3. One renewable energy source that can help reduce greenhouse gas emissions is wind power. Wind turbines convert kinetic energy from the wind into electricity without emitting greenhouse gases, providing a clean and sustainable alternative to fossil fuels.
4. Individuals can contribute to reducing greenhouse gas emissions by adopting energy-efficient practices such as using energy-efficient appliances, reducing energy consumption, conserving water, using public transportation or carpooling, supporting renewable energy initiatives, and advocating for climate-friendly policies in their communities.

