

Carbon Cycle Alterations - Answers

Deforestation in the Amazon

When humans cut down trees and burn them, the carbon that was stored in the trees is released.

Direction: Biosphere to Atmosphere

Planting New Trees

As newly planted trees grow, they take in more carbon dioxide to perform photosynthesis.

Direction: Atmosphere to Biosphere

Burning Fossil Fuels in Automobiles

When humans burn fossil fuels, which take millions of years to form, the carbon in the fossil fuels is released.

Direction: Lithosphere to Atmosphere

Farming Cattle

When cattle release gas from their digestive system, they release methane, a carbon-containing gas.

Direction: Biosphere to Atmosphere

Increased Cement Manufacturing for Dams

When humans create cement for dams and other structures, they heat rock containing calcium carbonate and carbon dioxide is released.

Direction: Lithosphere to Atmosphere

Capture and Store Carbon in Geological Formations

When humans capture carbon from power plants, they sometimes inject it into the ground where it is stored.

Direction: Lithosphere to Lithosphere

Atmosphere to Lithosphere acceptable, since carbon that would otherwise be released to the atmosphere is stored in the lithosphere.

Burning Fossil Fuels for Electricity

When humans burn fossil fuels, which take millions of years to form, the carbon in the fossil fuels is released.

Direction: Lithosphere to Atmosphere

Farming Rice

When humans farm rice in paddies, the fields are flooded and bacteria decompose organic matter resulting in methane, a carbon-containing gas.

Direction: Biosphere to Atmosphere

