

Driving Question: Will warm oceans be better or worse at absorbing CO₂?

It's a Gassy World Scavenger Hunt!

Question	Answer	Where did you find the answer?
How is CO ₂ used by animals and by plants?		
Where is carbon found in non-living parts of the earth?		
How does carbon move between the living and non-living parts of the earth?		
How are humans adding CO ₂ to the atmosphere?		
Is the atmosphere the only place the extra CO ₂ goes? Explain.		
What is the greenhouse effect?		
How does extra CO ₂ connect to the greenhouse effect?		
What does it mean if something is described as a carbon sink? Name two carbon sinks.		
Do oceans absorb carbon dioxide?		

Possible videos to check out include: "1-The Carbon Cycle" at (<https://archive.epa.gov/climatechange/kids/basics/today/carbon-dioxide.html>) and "2-The Greenhouse Effect" at (<https://archive.epa.gov/climatechange/kids/basics/today/greenhouse-effect.html>).

Answers to It's Gassy World Scavenger Hunt!

Question	Answer	Where did you find the answer?
How is CO ₂ used by animals and by plants?	Plants use combine the energy from the sun with CO ₂ to make sugars. Animals eat the sugars, then release CO ₂ during respiration and exhale it out.	
Where is carbon found in non-living parts of the earth?	Carbon is in the atmosphere (air), oceans, fossil fuels.	
How does carbon move between the living and non-living parts of the earth?	Plants absorb it, taking from atmosphere and putting it in living things, animals (and plants) release it out, dead organisms decompose.	
How are humans adding CO ₂ to the atmosphere?	Burning too much fossil fuel, cutting down trees and forests, etc.	
Is the atmosphere the only place the extra CO ₂ goes? Explain.	Some extra CO ₂ is absorbed by the oceans.	
What is the greenhouse effect?	The greenhouse effect is when the gasses in the atmosphere retain the radiant energy from the sun and trap the heat on earth instead of releasing it back to space.	
How does extra CO ₂ connect to the greenhouse effect?	CO ₂ is a greenhouse gas, meaning that it retains heat. So more CO ₂ means more heat, amplifying the greenhouse effect.	
What does it mean if something is described as a carbon sink? Name two carbon sinks.	Sinks are places where carbon can go to be stored for a long time. Oceans, forests, and fossil fuels are carbon sinks.	
Do oceans absorb carbon dioxide?	Yes.	