

Debating Greenhouse Gases

NAME _____

Overview: Students will work in pairs to research different greenhouse gases with the ultimate goal of deciding which greenhouse gas (GHG) should be a priority for the world to eliminate first based on the data they researched.

Use the links on Schoology to fill out the data table below. Work as a pair and split up the research work and then talk to each other to help fill in your partner's half.

Greenhouse Gases Data				
Carbon Dioxide (CO ₂)	Methane (CH ₄)	Nitrous Oxide (N ₂ O)	HydroFluoro-Carbons (HFCs)	ChloroFluoro-Carbons (CFCs)
Lifetime	Lifetime	Lifetime	Lifetime	Lifetime
Atmospheric Concentration (ppm)	Atmospheric Concentration (ppm)	Atmospheric Concentration (ppm)	Atmospheric Concentration (ppm)	Atmospheric Concentration (ppm)
Global Warming Potential (GWP)	Global Warming Potential (GWP)	Global Warming Potential (GWP)	Global Warming Potential (GWP)	Global Warming Potential (GWP)
How much gas does the US make per year?	How much gas does the US make per year?	How much gas does the US make per year?	How much gas does the US make per year?	How much gas does the US make per year?
How does US society make or release this gas?	How does US society make or release this gas?	How does US society make or release this gas?	How does US society make or release this gas?	How does US society make or release this gas?

Initial Thinking

For each category below, talk as a pair and decide which of the five gases do you think best fits the category. You can put more than one gas per category, but try to keep it to one or two.

Smallest amount	Cheapest to solve	Easiest to solve
Everyone can help solve	Requires government to solve	Hardest to solve
Expensive to solve	We could start fixing today	Would require new technology or systems to solve

Coming to a Consensus

Given what your pair thought about the gases in the spaces above, now you should try to decide which **ONE** gas you two think we as a world should try to stop first. As you are doing this, think about where the gases come from and how society would need to change in order to stop producing each gas. There is no one correct answer and different groups will make different decisions. What is important is to use the data you gathered as part of your decision-making. Please explain your reasoning and include your data from above as you write about a paragraph in length.