

Activity 4: The Carbon Cycle

1. **Match** the carbon cycle process to its best definition

1. Photosynthesis
 - a. Form from organic decay over millions of years
2. Cellular Respiration
 - b. CO₂ gas exchange by bodies of water like our oceans
3. Combustion
 - c. Living things break apart glucose for energy and releases CO₂
4. Decomposition
 - d. Transfer of carbon from one organism to another through eating
5. Diffusion
 - e. Plants take in CO₂ in this process to make food
6. Consumption
 - f. Burning of fossil fuels releases CO₂
7. Deposition into Fossil Fuel Stores
 - g. When living things die and breakdown into the soil and release some CO₂ into the air

2. **Word Sort:** Does it add CO₂ to the atmosphere or remove CO₂ from the atmosphere?

Adds CO ₂ to atmosphere	Removes CO ₂ from atmosphere

Word Bank: Photosynthesis, Cellular Respiration, Combustion, Diffusion, Decomposition, Carbon in living things, Fossil Fuel Stores

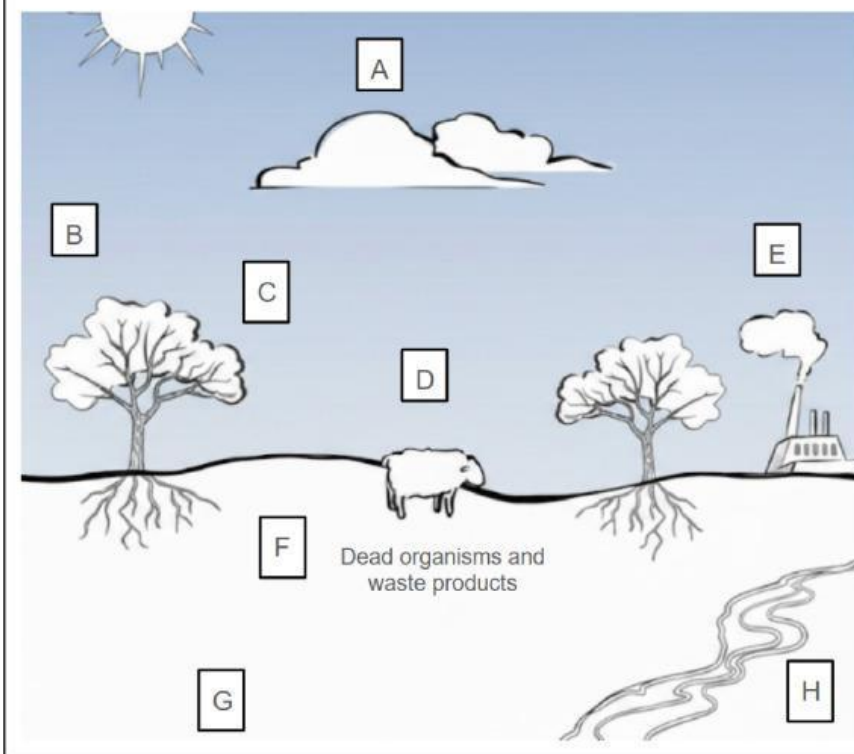
3. Carbon Sinks

A carbon sink is a place that absorbs and stores more carbon from the atmosphere than it releases.

Can you name at least 3 Carbon Sinks?

- a. _____
- b. _____
- c. _____

4. Label the Carbon Cycle Diagram



Write the letter next to the correct process:

Cellular respiration by animals	
Deposition of organic carbon to fossil fuels	
Decomposition	
Atmospheric CO ₂	
Photosynthesis	
Diffusion (Ocean gas exchange)	
Combustion of fossil fuels	
Cellular respiration by plants	