

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. CO ₂ gas exchange by bodies of water like our oceans |
| 3. Combustion | c. Living things break apart glucose for energy and releases CO ₂ |
| 4. Decomposition | d. Transfer of carbon from one organism to another through eating |
| 5. Diffusion | e. Plants take in CO ₂ in this process to make food |
| 6. Consumption | f. Burning of fossil fuels releases CO ₂ |
| 7. Deposition into Fossil Fuel Stores | g. When living things die and breakdown into the soil and release some CO ₂ 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?

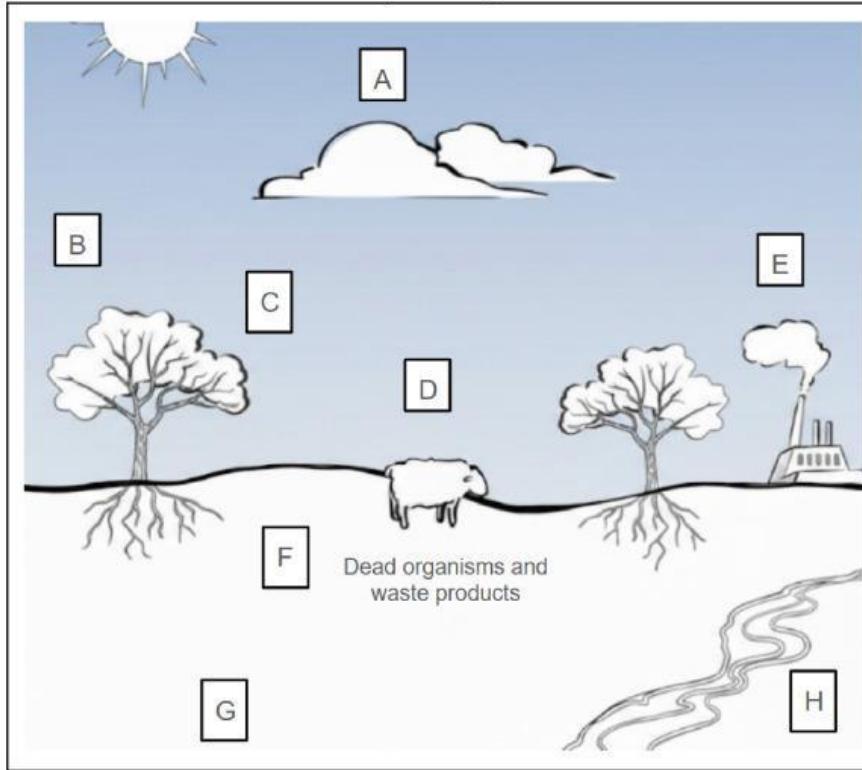
a. _____

b. _____

c. _____

3.2 Processes of Living Systems

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 | |