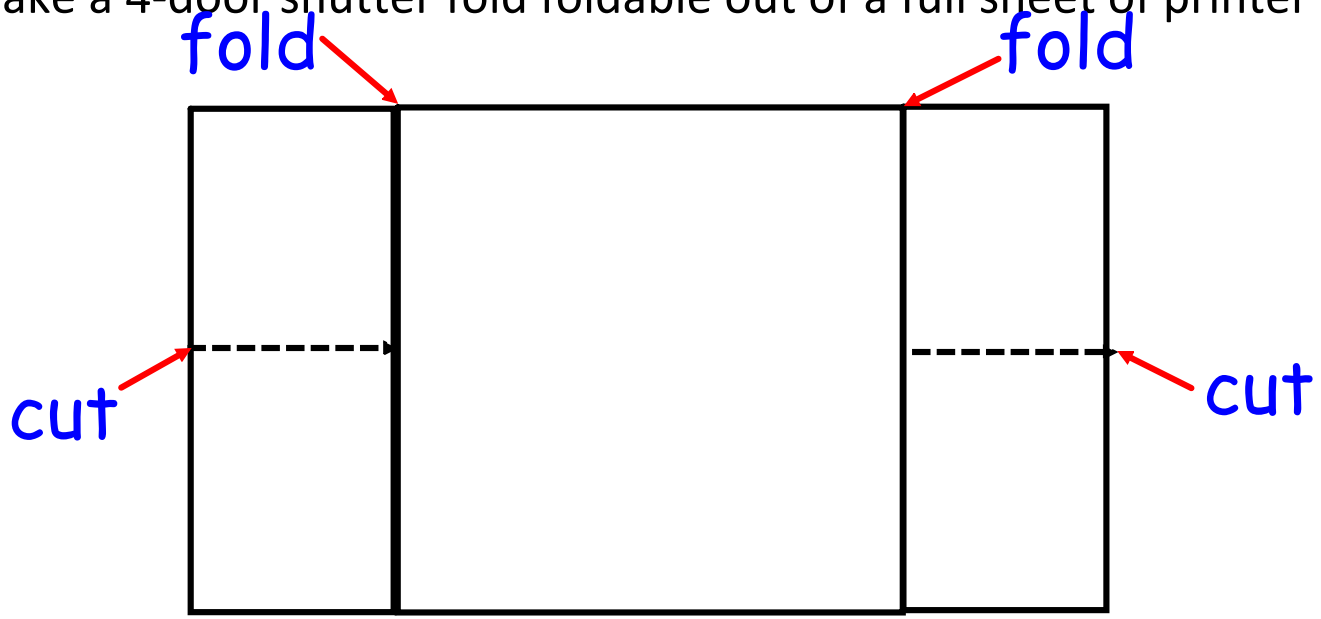
Carbon Cycle Foldable Directions

Make a 4-door shutter fold foldable out of a full sheet of printer paper.



Carbon Cycle Foldable Directions

Outside/front details:

1st flap upper left hand corner top – write "**Photosynthesis and Respiration**"

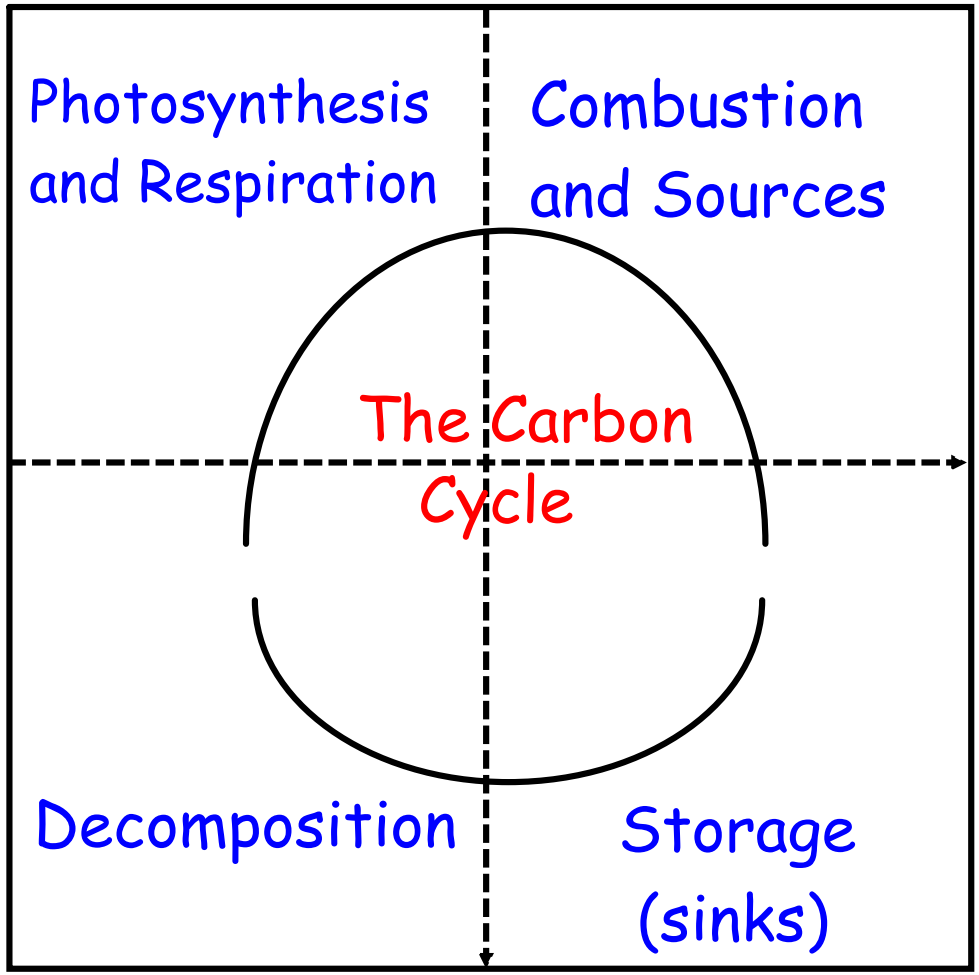
2nd flap, lower left near the bottom – write, "**Decomposition**"

3rd flap, upper right hand corner, top – write, "**Combustion and Sources**."

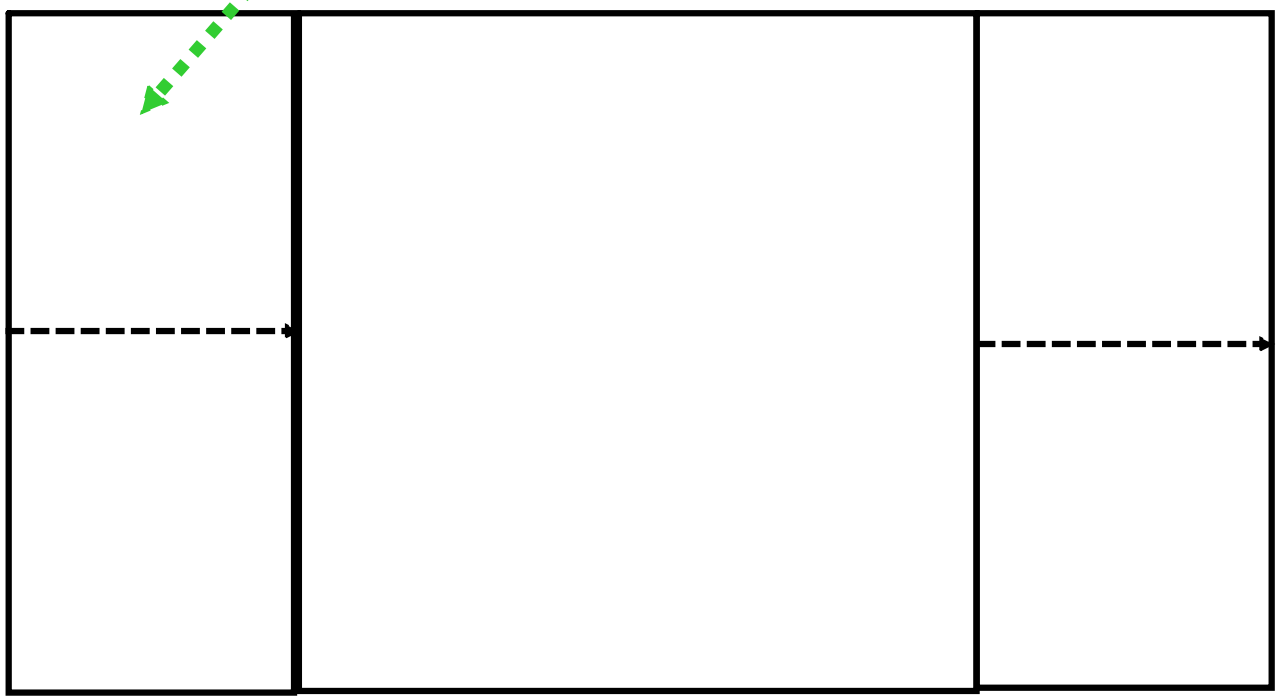
4th flap, lower right corner near the bottom – write, "**Storage**" with the word "**sinks**" underneath in parentheses.

Carbon Cycle Foldable Directions

Finally, in the middle of the 4-doors on the front, write: "**The Carbon Cycle**". Use circular arrows from one panel (door) to another to illustrate the cycling of carbon from one part of the earth to another.


Photosynthesis and Respiration
Combustion and Sources
The Carbon Cycle
Decomposition
Storage (sinks)

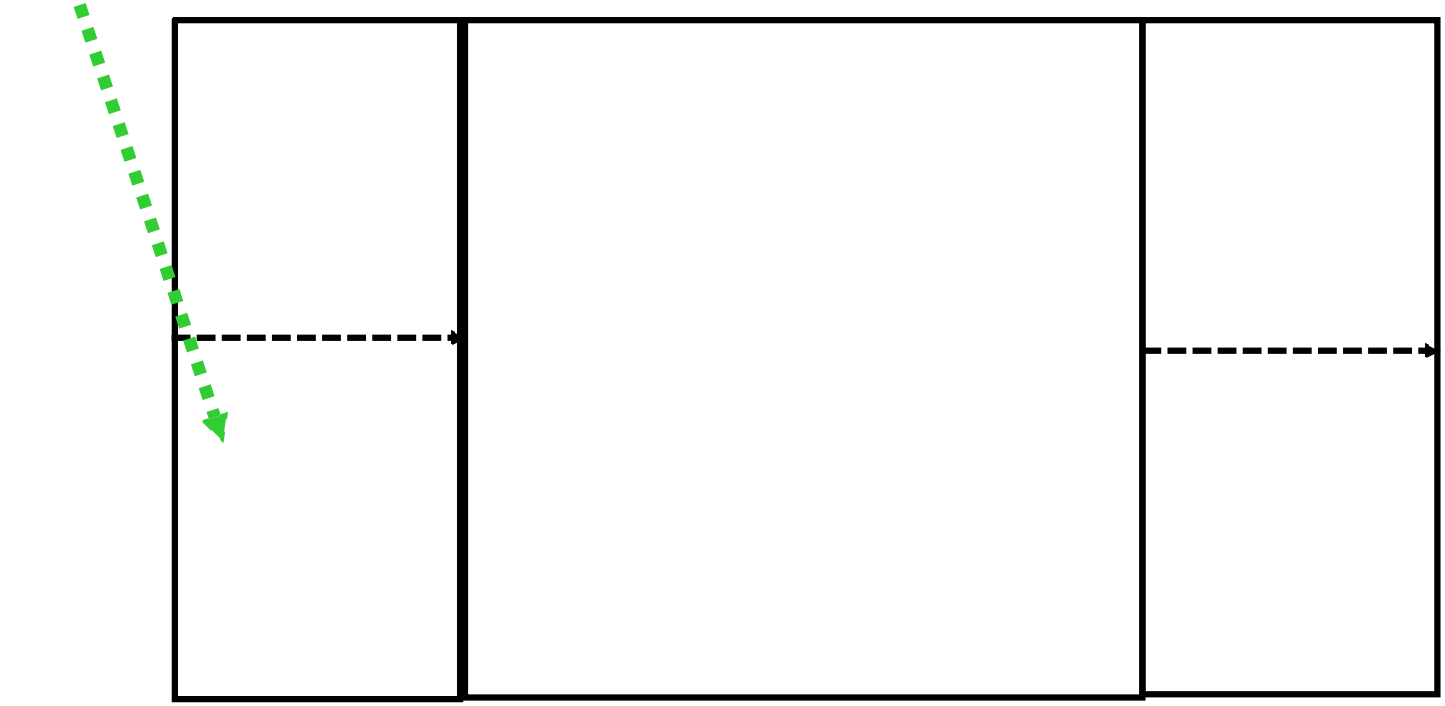
1st flap upper left hand corner (photosynthesis and respiration), write the following:



1st flap upper left hand corner (photosynthesis and respiration), write the following:

- Plants take in CO2, sunlight, and water to make food (photosynthesis). This carbon is used for energy. Some is stored for growth. (water + carbon dioxide + sunlight = glucose, water. and oxygen)
- Animals get the carbon from eating plants or from eating animals that eat plants.
- Animals and plants put CO2 back in the atmosphere during respiration. (The process of converting food to energy using oxygen and giving off CO2).

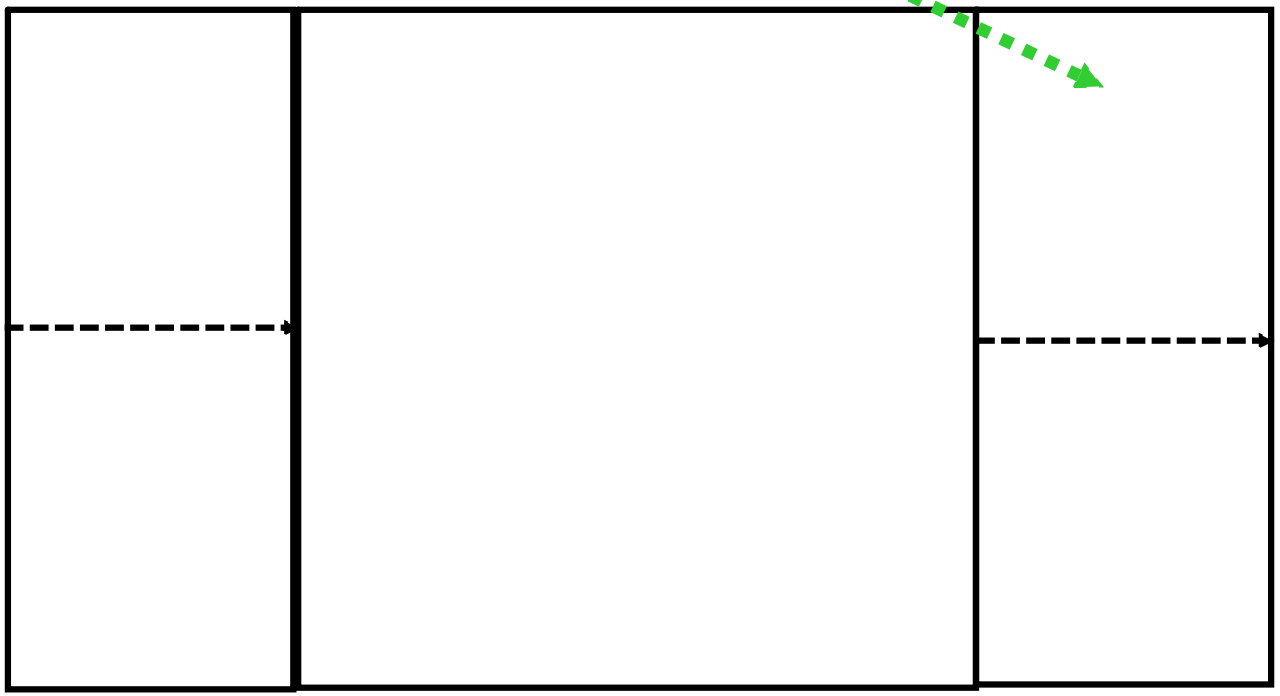
2nd flap lower left hand corner (decomposition), write the following:



2nd flap lower left hand corner (decomposition), write the following:

- **When plants and animals die, decomposers break down the carbon compounds in the bodies of the decaying matter. The decomposers use some of the carbon for their own bodies, while the rest is returned to the atmosphere through respiration as carbon dioxide.**
- **When some plants die, they become buried and cemented over time. After millions of years, some become fossil fuels.**

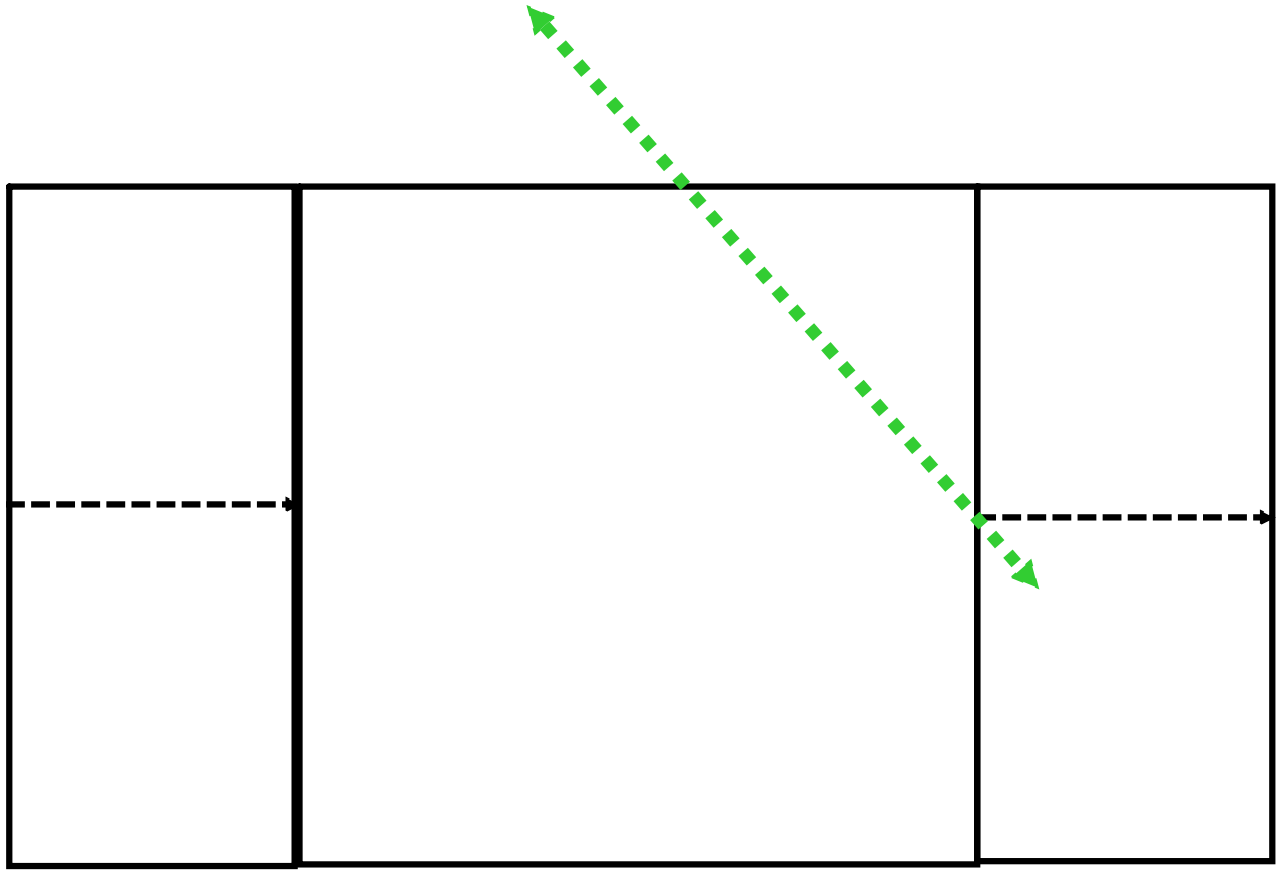
3rd flap upper right corner (combustion and sources)



3rd flap upper right corner (combustion and sources)

When fossil fuels are extracted from the earth and burned, CO2 is released into the atmosphere. Other carbon sources are animals, forest fires, and volcanic eruptions.

4th flap lower right corner (Storage and sinks)



4th flap lower right corner (Storage and sinks)

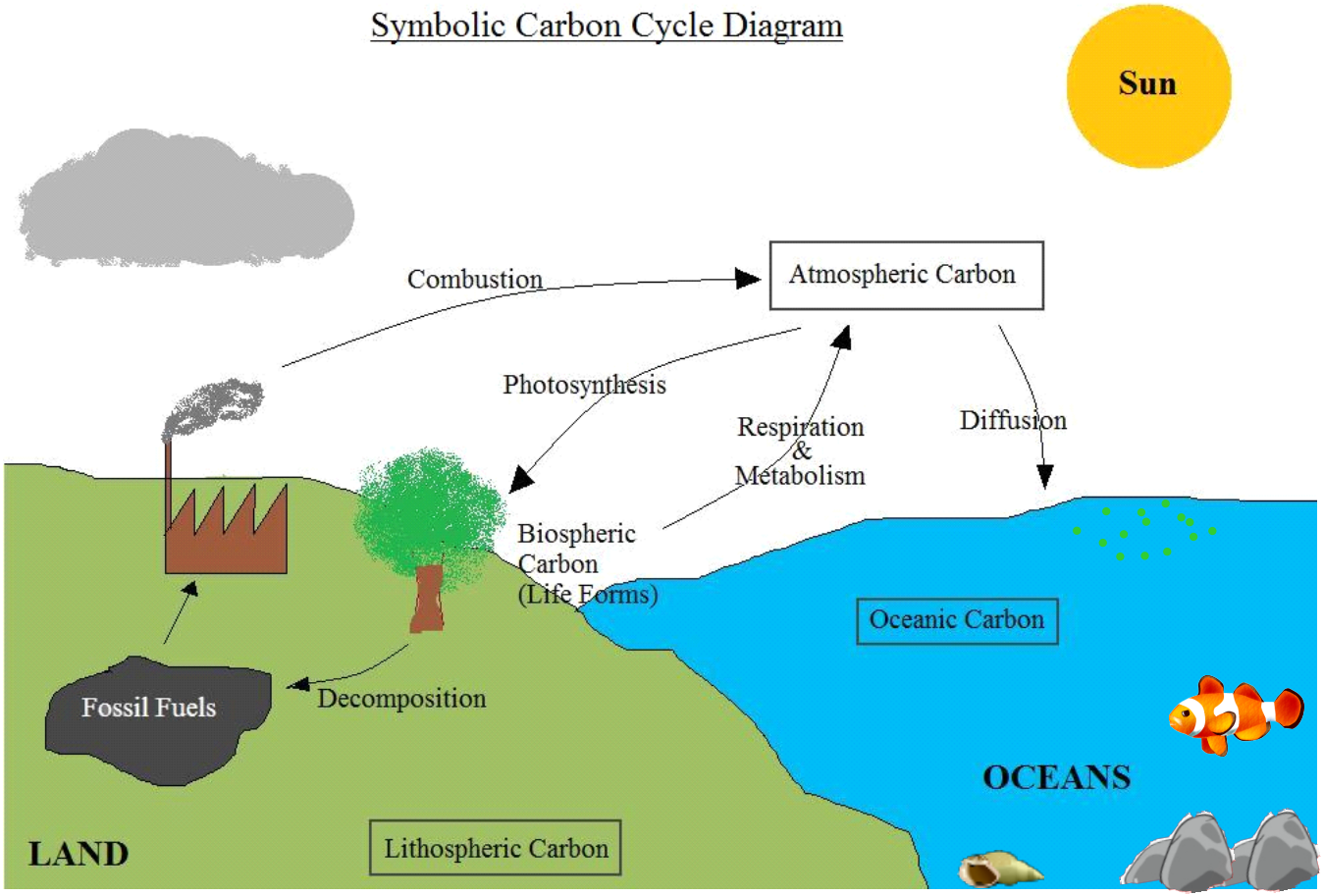
A place on earth where carbon is stored/absorbed is called a "sink". The following are all places on earth that store carbon:

1. **Water**
   Surface and deep ocean*
2. **Plants and trees***
3. **Atmosphere**
4. **Fossil Fuels**
5. **Rocks (carbonates like limestone)**
6. **Soil**
7. **Shells (contain CaCO3, calcium carbonate)**

Place an asterisk * next to deep ocean and plants and trees since these are earth's largest sinks.

Inside Middle

Use the picture to help you draw a diagram of the carbon cycle.



Also draw in rocks, shells, a fish, and phyto plankton since all of these are part of the cycle as well.