

Directions: To access the Activity, go to Weebly → Activities → Carbon Cycle Game. During the activity, you are pretending to be a carbon atom moving around Earth's reservoirs (an area that stores items, like Carbon).

Part 1: As you move from one reservoir to the next, fill in the blanks and draw a picture representing the description in the text. Your picture must illustrate the text description for credit.

Reservoir	Description	Draw A Model
Fossil Fuels	<p>For millions of years you were _____ in fossil fuels. Now, you have been released into the _____ as humans burn _____. Did you know that _____ megatons of carbon are released into the atmosphere as fossil fuels are burned each _____?</p>	
Atmosphere	<p>While you are here, little carbon atom, you will be stuck to two atoms of oxygen in a greenhouse gas called _____. Only a small amount (_____) of the atmosphere is made of carbon dioxide. Because of burning fossil fuels, the amount has increased _____ in the past _____ years. More carbon dioxide in our atmosphere makes our planet _____.</p>	
Land Plants	<p>You have been taken out of the atmosphere by a _____ as it used the Sun's energy to make the nutrition it needs (a process called _____). You are now one of the _____ blocks that make up a plant. As more carbon dioxide is added to our atmosphere, plants will be able to grow _____. Plants also release carbon back to the atmosphere by _____.</p>	

Soil	<p>We are afraid to say that the plant you were in has _____. The good news is that, you are now a part of the _____ called detritus, which is decomposing _____ and _____. Soil is also made of inorganic parts such as _____, _____, and _____. Soils store about ____ of Earth's carbon. As bacteria and fungi _____ the detritus, carbon is sent into the _____.</p>	
Surface Ocean	<p>Either you got here by diffusing from the _____, by _____ marine life, or from _____ water from the deep ocean. The ocean _____ more carbon dioxide from the _____ than the land does. The surface ocean takes in approximately ____ Gigatons of carbon per year. Cold water absorbs carbon _____ than warm water.</p>	
Marine Life	<p>Tiny marine organisms called _____ take in carbon to make the nutrition they need through a process called _____. The phytoplankton are eaten by _____ marine life. Marine life cannot _____ without carbon, but _____ levels of carbon dissolved in ocean waters are _____ to marine organisms such as _____, _____ and _____.</p>	
Deep Ocean	<p>The deep ocean gets carbon from _____ with the surface ocean and _____ and _____ marine life. When carbon gets to the deep ocean, it usually stays there for _____ of years before moving on. The deep ocean holds more than _____ of the Earth's carbon.</p>	

Part 2: Synthesize the information by drawing arrows indicating the flow of carbon from one reservoir to the next. You will have to go back and review information from Part 1. In between each arrow, write the REASON for the carbon movement. I have demonstrated one example for you!

Soil

Marine Life

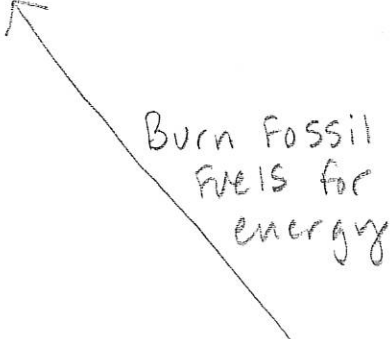
Land Plants

Surface Ocean

Atmosphere

Deep Ocean

Fossil Fuels



Part 3: With the teacher, draw the carbon cycle.

