

Carbon in the Spheres Practice Test Questions

Explain in as much detail as you can the evolution of the Earth (how it has changed), do not explain the evolution of life over the past 500 million years. What were the significant events that have taken place, how has the atmosphere, climate, landmasses and life changed.

Draw a global Carbon Cycle. Label the main reservoirs of carbon. Draw and label arrows showing the process and the direction of Carbon movement. Lastly put a 1, 2, 3, or 4 under the label of each reservoir showing which reservoir holds the most carbon, 2nd most, 3rd most and 4th most. Extra points for labeling correct amounts of Carbon.

Our planet is currently warming due to human activity. Explain how this works. (focus on how the Carbon Cycle works, carbon moving to and from the hydrosphere (water), Biosphere (living things), atmosphere, and lithosphere (rock and Earth); and how the greenhouse effect works and the impacts of the movement of carbon)

Explain how, why, and where the nitrogen cycle works. (Your answer should be able to tell me what you know about the nitrogen cycle, where is it stored, how does it move from reservoir to reservoir and you need to include why the nitrogen cycle is relevant (meaningful to us) to us. Think about your own journey from the lab).

What solutions can you offer our society about the problem of our planet warming? (Think of the reason for our warming. How can we stop putting carbon dioxide into the atmosphere? Explain how your solutions work.)

Explain the issues involved with converting our planet's power needs into renewable energy from fossil fuel energy. (Think about your energy table in your notebook, think about the problems with all forms of renewables, and why fossil fuels became the dominant source of energy over the past 150 years).