

1. What is the difference between an open and a closed system?
2. Is the Earth an open or closed system?
3. Give all the evidence that you can come up with to defend your answer for question # 2.
4. What are the 4 different Spheres that Earth consists of? Give a simple illustration of each.
5. Do interactions occur between the above 4 spheres (systems)?
6. Give at least 2 examples of interactions between different spheres (systems), and explain them.

7. Think back to how we talked about a change in one system can cause a chain of events throughout the other systems. Complete the following chart below describing how events can cause a change from system to system.

	Atmosphere	Lithosphere (land)	Hydrosphere (water)	Biosphere (living)
Tornado	<p>Changing weather system causes tornado</p> <p>Gasses can be released into the air possibly GHG's.</p>	Land is ripped up, habitats can be destroyed, pollution can be distributed, and destruction to industrial plants can release pollutants into land, water, and air.	Floods can occur, pollutants can be released into bodies of water	Habitat destruction for animal, food resources can be depleted.
Volcano Eruption				
Greenhouse gasses are let into the atmosphere.				

8. Does energy get transferred from one system to another?

9. If so, where does Earth Energy originate? (There are multiple answers for this)

10. Explain the transfer of Energy that starts from the sun and moves through the spheres to us humans?

11. Draw a picture to correspond with your explanation in question # 10.