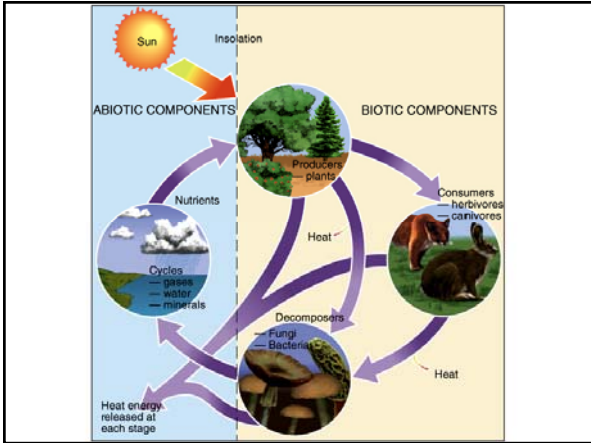
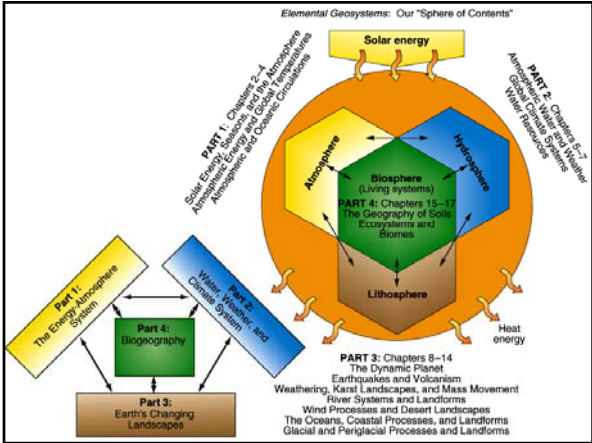


Essay Review #3

GEOG 101
The Natural Environment

1. Describe and explain the (1) components (“spheres”: three abiotic and one biotic) of the **Earth’s ecosystem**, including the (2) energy input/output and (3) three cycles.

Note: You may include a diagram to support your answer (5 points).

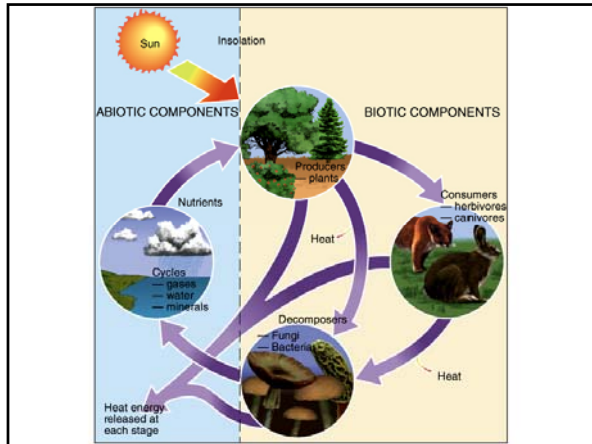


1. Describe and explain the (1) components (“spheres”: three abiotic and one biotic) of the **Earth’s ecosystem**, including the (2) energy input/output and (3) three cycles.

Note: You may include a diagram to support your answer (5 points).

- (1) Atmosphere
- (2) Hydrosphere
- (3) Lithosphere
- (4) Biosphere
- (5) EG & 3 material cycles
Insolation, heat generation & outgoing radiation
Gases, water & mineral cycles

2. Compare and contrast the functions of the three **biotic** sub-components. What do they do in the Earth’s ecosystem? Include examples of each biotic component (5 points).



- (1) Producers (all 3 correct = 1 pt)
Function (total 3 pts, 1 pt each)
Example(s): Plants (all 3 correct = 1 pt)
- (2) Consumers
Function (1 pt)
Example(s): Herbivores, carnivores & omnivores
- (3) Decomposers
Function (1 pt)
Example(s): Fungi & bacteria

3. Evaluate nature-human relationships in terms of the (1) **energy** flow, and (2) **nutrient** flow among the abiotic and biotic components. What should we do, or not do to conserve Earth's ecosystem? Support your ideas with some concrete facts/observations (10 points).

