Geochemical Review

Part 1 = Multiple Choice

1. Which of the following is **not** an example of a biological process in a geochemical cycle? A. Transpiration B. Nitrogen fixation by bacteria C. Erosion D. Birds excreting waste into water 2. Carbon dioxide is returned to the atmosphere primarily by A. Consumption by animals B. Combustion and cellular respiration by consumers C. Elimination of waste by animals D. Photosynthesis by producers 3. Carbon cycles through the biosphere in all of the following processes **EXCEPT** A. Photosynthesis B. Transpiration C. Burning of fossil fuels D. Decomposition of plants and animals 4. Nitrogen fixation is carried out mainly by A. Humans B. Plants C. Animals D. Bacteria 5. Which of the following steps of the water cycle is the only step that has to have living organisms in order to happen? A. Transpiration B. Condensation C. Evaporation D. Precipitation

Part 2 = Short Answer

6. Describe an example of how non-human living organisms participate in each of the cycles. List the name of the organism, the step of the cycle it is involved in and what it does specifically in that step.

| | Name of Organism | Step Involved in | Description |
|-------------------|------------------|------------------|-------------|
| Water Cycle | | | |
| Carbon Cycle | | | |
| Nitrogen Cycle | | | |

7. Describe an example of how humans can negatively impact each of the cycles. Note: You should have 3 examples, 1 per cycle.

<u> Part 3</u>

8. Draw the water cycle below. Be sure to label each step with the appropriate name and arrows to show that you understand what is happening in each step.