

Biogeochemical Nutrient Cycle Poster Presentation

Nitrogen cycle

Phosphorus cycle

Sulfur cycle

Carbon-oxygen cycle

Water cycle

Due date: _____

Complete the following tasks and be ready to present your work on the due date above.

1. Use your textbook, other science textbooks and the Internet to research the movement of one of the nutrient cycles (assigned to you by your teacher). Be sure to learn the following before you begin making your poster and before you give your verbal presentation:

- a. What are the most common chemical forms this nutrient takes? (Name all that apply.)
- b. How are each of these chemical forms created? Be able to describe the process of each chemical transition.
- c. How is this nutrient used by living organisms—is it part of a particular macromolecule necessary for life?
- d. Does this nutrient cycle through the lithosphere, hydrosphere and atmosphere? What are the forms it takes in each of the spheres?
- e. Where is this cycle naturally slowest? Where is the cycle naturally fastest?
- f. How have humans altered the cycling of this nutrient?
- g. What are some ways that humans can reduce the effect they have on the cycling of this nutrient?

2. Your poster should feature the information you have found in your research. Please draw a clear, large diagram using wide-tipped, dark-colored markers so that your diagram can be seen and read from across the classroom. Please include all of the following:

- a. Write the name of your nutrient cycle at the top of the poster.
- b. Next to the nutrient name write the name of the macromolecule in which this nutrient is found.
- c. Draw a large labeled diagram of the cycling of this nutrient that includes its most common chemical forms.
- d. With a red marker, color the part of the cycle that is slowest.
- e. With a green marker, color the part of the cycle that is fastest.
- f. Make a list of human influences on this nutrient cycle.