Mr. S. Lewchuk

Science 10 Biogeochemical Cycles

By completing this assignment, students will meet course outcome:

SCI10-CD4

Investigate the role of feedback mechanisms in biogeochemical cycles and in maintaining stability in ecosystems.

(a)	Explain systems in terms of their type (e.g., open, closed and isolated), equilibrium (e.g., dynamic, static, stable and unstable) and their associated feedbacks (e.g., positive and negative).
(b)	Create a representation of a feedback mechanism that is relevant to a specific biogeochemical (e.g., carbon, nitrogen, phosphorus and water) cycle. (S)
(d)	Describe how human actions can affect the cycling of matter and flow of energy through ecosystems. (K, A, STSE)
(i)	Analyze the interdependence between the water cycle and other biogeochemical cycles. (K, S)

Students will become an expert regarding **one (1)** of Earth's Biogeochemical Cycles:

- Carbon Cycle
- Nitrogen Cycle
- Phosphorus Cycle
- Hydrologic (Water) Cycle

Using their research skills, students will gather knowledge about their selected Biogeochemical Cycle. Students will design and produce an artifact of digital media to illustrate the following:

1. Definition of "Biogeochemical Cycle."
2. Summary illustrating all four listed Biogeochemical Cycles.
3. Explanation of their cycle in terms of their type (open, closed, isolated) and mechanics. This can take the form of a diagram.
4. Describe how human actions can affect the cycling of matter and flow of energy through ecosystems.