

Explain: Carbon Cycle and Nitrogen Cycle

PROCESS AND PROCEDURES

1. Draw diagrams of the carbon cycle and nitrogen cycle in your notebook based on the diagrams your teacher puts at the front of the room.
2. Answer the questions below based on your diagrams.

ANALYSIS

Write the following questions in your notebook and answer them using complete sentences.

1. In the carbon cycle, which processes pull CO₂ out of the atmosphere?
2. Which processes contribute to the CO₂ in the atmosphere?
3. Which processes in the carbon cycle have been decreasing over the last 100 years, and which processes have been increasing over the last 100 years? How do you think this would affect CO₂ levels in the atmosphere over the last 100 years?
4. Why do we care which parts of the carbon cycle have more or less carbon?
5. Can humans and other animals use nitrogen directly from the atmosphere?
6. Can plants pull **carbon** out of the atmosphere? If so, what process do they use?
7. Can plants pull **nitrogen** from the atmosphere? If so, what process do they use?
8. Do plants supply carbon and/or nitrogen to animals? If so, via what processes?
9. Do animals supply carbon and/or nitrogen to plants? If so, via what processes?
10. Which processes contribute to making nitrogen available to animals and plants? Which of these processes do you think might contribute the most nitrogen to plants and animals?
11. Describe where composting takes place in the nitrogen cycle.