Quiz 13 - Ecosystem Ecology - Nutrient Cycling

Due Apr 14 at 11:59pm **Points** 7 **Questions** 7
Available until Apr 14 at 11:59pm **Time Limit** 60 Minutes
Allowed Attempts 2

Instructions

This quiz asks questions about the carbon and nitrogen cycle and limiting factors.

You have 2 attempts at this quiz. The highest mark counts. You have 60 minutes to complete each attempt.

This quiz is due at 11:59 pm on Friday, April 14. I hope to cover nutrient cycling on Tuesday, the 11th (second to last class)

Take the Quiz Again

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	6 minutes	7 out of 7

ⓘ Correct answers will be available Apr 15 at 12pm - Apr 23 at 6pm.

Score for this attempt: **7** out of 7
Submitted Apr 12 at 10:29pm
This attempt took 6 minutes.

Question 1 — 1 / 1 pts

An ecosystem consists of all the organisms of a particular region plus all of the abiotic components. Which of the following are abiotic factors that might be included when defining an ecosystem? (Select all that apply)

- [x] Water availability

- [ ] Microorganisms
- [x] Temperature
- [x] Nutrient availability
- [ ] Biodiversity

Question 2

1 / 1 pts

Plants are primary producers (autotrophs = "self-feeders"). If a large proportion of the plant species in a given ecosystem were removed, then the net primary productivity (NPP) and biomass of that ecosystem would likely:

- (•) Decrease
- ( ) Increase
- ( ) Stay the same
- ( ) Plants are not involved in NPP

Question 3

1 / 1 pts

How does carbon from the atmosphere enter into an ecosystem?

- (•) It is added or “fixed” by photosynthesis in plants
- ( ) Burning of fossil fuels
- ( ) Through decomposition (mostly occurring in the soil)
- ( ) Through erosion

Via human impacts, such as deforestation

Question 4

1 / 1 pts

How is carbon released from living organisms back to the atmosphere?

- (•) Cellular respiration
- ( ) Photosynthesis
- ( ) Burning of fossil fuels, coal, wood or peat
- ( ) Erosion

Cellular respiration releases carbon that has been incorporated into living tissue, back to the atmosphere. This happens via any living organism. Burning of fuels releases CO2 from inactive geological reservoirs made from long-dead organisms.

Question 5

1 / 1 pts

Match the following terms with their definitions:

Decomposer	Organisms that feed on d
Primary consumer	Organisms that feed on li
Tertiary consumer	

Organisms that are predat

Producer Organisms that synthesiz

Question 6

1 / 1 pts

Which of the following is true about the global nitrogen cycle?

- (●) The main form of nitrogen on Earth is nitrogen gas (N_2)
- ( ) The only usable form of nitrogen for plants is N_2
- ( ) Nitrogen (in the form of N_2) is ~78% of the atmosphere, meaning it is an abundant and non-limiting nutrient in all ecosystems

Question 7

1 / 1 pts

Which of the following is/are true about nitrogen?

- [x] Nitrogen can be limiting factor for plant growth in some ecosystems
- [x] If nitrogen is limiting, adding more nitrogen to the ecosystem can increase plant growth.
- [ ] If nitrogen is not limiting, adding more nitrogen to an ecosystem will increase plant growth
- [x] Human are overloading many ecosystems with nitrogen due to the burning of fossil fuels and the production of fertilizers.

Quiz Score: **7** out of 7