

Name: _____

Date: _____

Nitrogen Cycle Science Worksheet

TOPIC: THE NITROGEN CYCLE

Instructions: Choose the best answer for each question.

1. What is the main function of the nitrogen cycle in ecosystems?

- A) To produce oxygen for organisms
 - B) Convert nitrogen into usable forms for plants and animals
 - C) To remove carbon dioxide from the air
 - D) To create food for herbivores
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2. In which form is nitrogen most abundant in the atmosphere?

- A) Nitrites (NO_2)
 - B) Nitrates (NO_3)
 - C) Ammonia (NH_3)
 - D) Nitrogen gas (N_2)
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3. What process allows nitrogen gas (N_2) from the atmosphere to be converted into ammonia (NH_3) by certain bacteria?

- A) Photosynthesis
 - B) Nitrogen fixation
 - C) Respiration
 - D) Nitrification
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4. Which type of organisms are primarily responsible for nitrogen fixation?

- A) Plants
 - B) Fungi
 - C) Bacteria
 - D) Insects
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5. What is the process by which plants absorb nitrogen from the soil?

- A) Nitrogen fixation
 - B) Assimilation
 - C) Denitrification
 - D) Ammonification
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6. Which of the following is a step in the nitrogen cycle where bacteria convert ammonia into nitrites and then into nitrates?

- A) Assimilation
 - B) Denitrification
 - C) Nitrification
 - D) Nitrogen fixation
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7. What is the process called when nitrates in the soil are converted back into nitrogen gas and released into the atmosphere?

- A) Denitrification
 - B) Ammonification
 - C) Nitrogen fixation
 - D) Respiration
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8. How do animals primarily get the nitrogen?

- A) By breathing in nitrogen gas from the atmosphere
 - B) By consuming plants or other animals
 - C) By absorbing nitrogen through their skin
 - D) By converting sunlight into nitrogen compounds
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9. The decomposers play in the nitrogen cycle?

- A) They convert nitrogen gas into usable forms
 - B) Break down dead plants and animals, returning nitrogen to the soil
 - C) They produce nitrogen gas during photosynthesis
 - D) They absorb nitrogen from the soil
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10. Excessive use of fertilizers can disrupt the nitrogen cycle by causing which environmental issues?

- A) Air pollution
 - B) Ocean acidification
 - C) Eutrophication in water bodies
 - D) Ozone layer depletion
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Answer Key:

1. B
2. D
3. B
4. C
5. B
6. C
7. A
8. B
9. B
10. C