

Name \_\_\_\_\_

## Nourishing the Earth: The Impact of the Nitrogen Cycle on Soil Fertility

### Multiple Choice Questions

1. What is the role of nitrogen fixation in soil fertility?
  - a) To convert atmospheric nitrogen into ammonium
  - b) To convert nitrate into ammonium
  - c) To release nitrogen gas into the atmosphere
  - d) To absorb nitrogen from the soil
  
2. How do plants utilize nitrogen obtained from the soil?
  - a) By releasing it into the atmosphere
  - b) By converting it into proteins and other essential molecules
  - c) By storing it in the roots
  - d) By excreting it into the soil
  
3. What is the significance of nitrification in the nitrogen cycle?
  - a) It converts nitrogen gas into nitrate
  - b) It converts ammonium into nitrite
  - c) It converts nitrate into atmospheric nitrogen
  - d) It converts ammonium into nitrate
  
4. What is the primary purpose of denitrification in soil ecosystems?
  - a) To increase nitrogen availability for plants
  - b) To convert nitrate into ammonium
  - c) To reduce nitrogen pollution by returning nitrogen gas to the atmosphere
  - d) To promote the growth of nitrogen-fixing bacteria
  
5. How does the nitrogen cycle contribute to soil fertility?
  - a) By reducing the availability of nitrogen for plants
  - b) By converting atmospheric nitrogen into a form usable by plants
  - c) By releasing excess nitrogen into water bodies
  - d) By decreasing the productivity of terrestrial ecosystems

