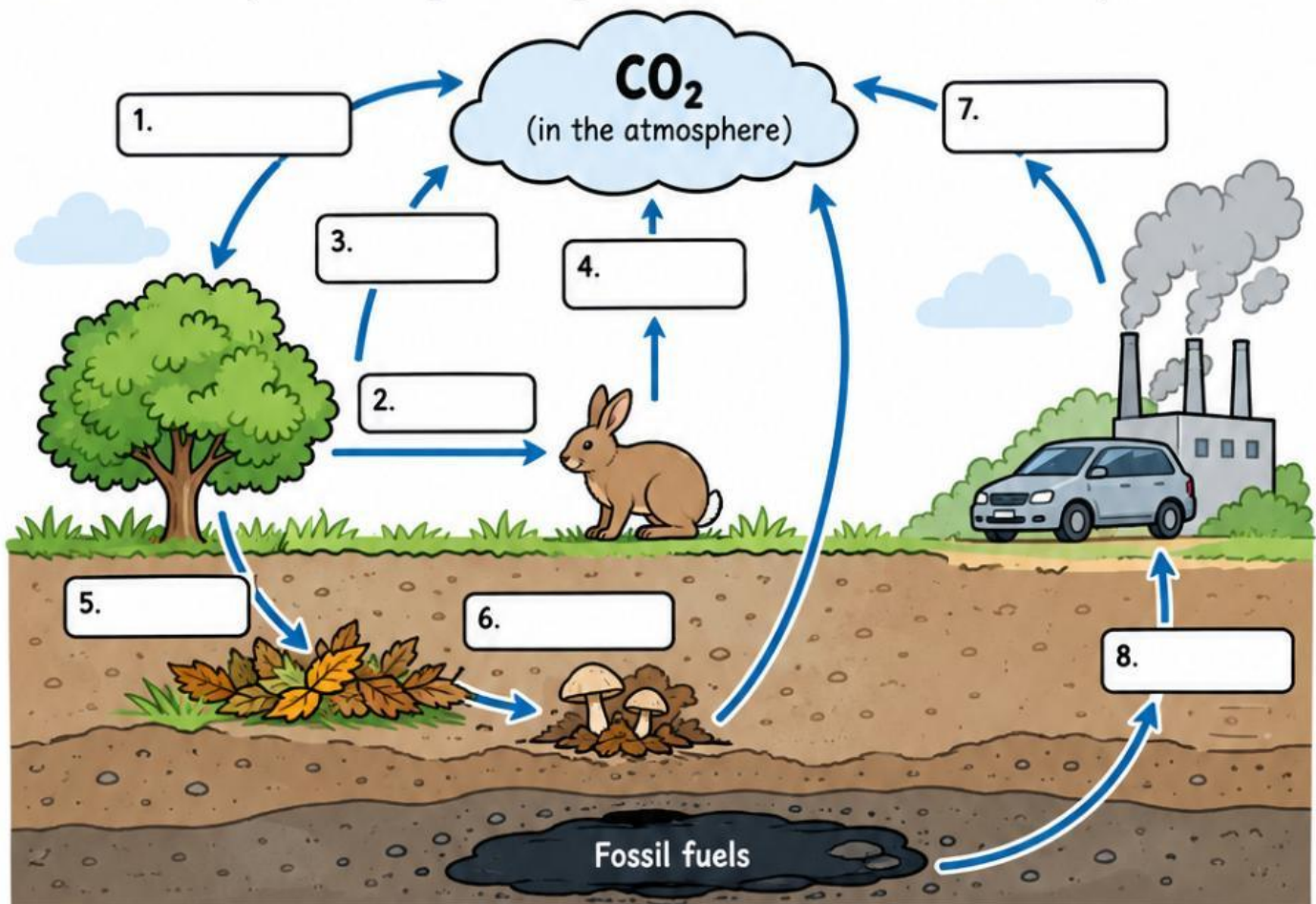


Name: \_\_\_\_\_

Date: \_\_\_\_\_

# THE CARBON CYCLE

Part A — Complete the diagram using the word bank. Then answer the questions.



## WORD BANK

Photosynthesis • Feeding • Plant respiration • Animal respiration  
Death and waste • Decomposition • Fossil fuels • Combustion

## Part B — CHECK YOUR UNDERSTANDING

1. Which process removes carbon dioxide from the atmosphere?

\_\_\_\_\_

2. Name two processes that release carbon dioxide into the atmosphere.

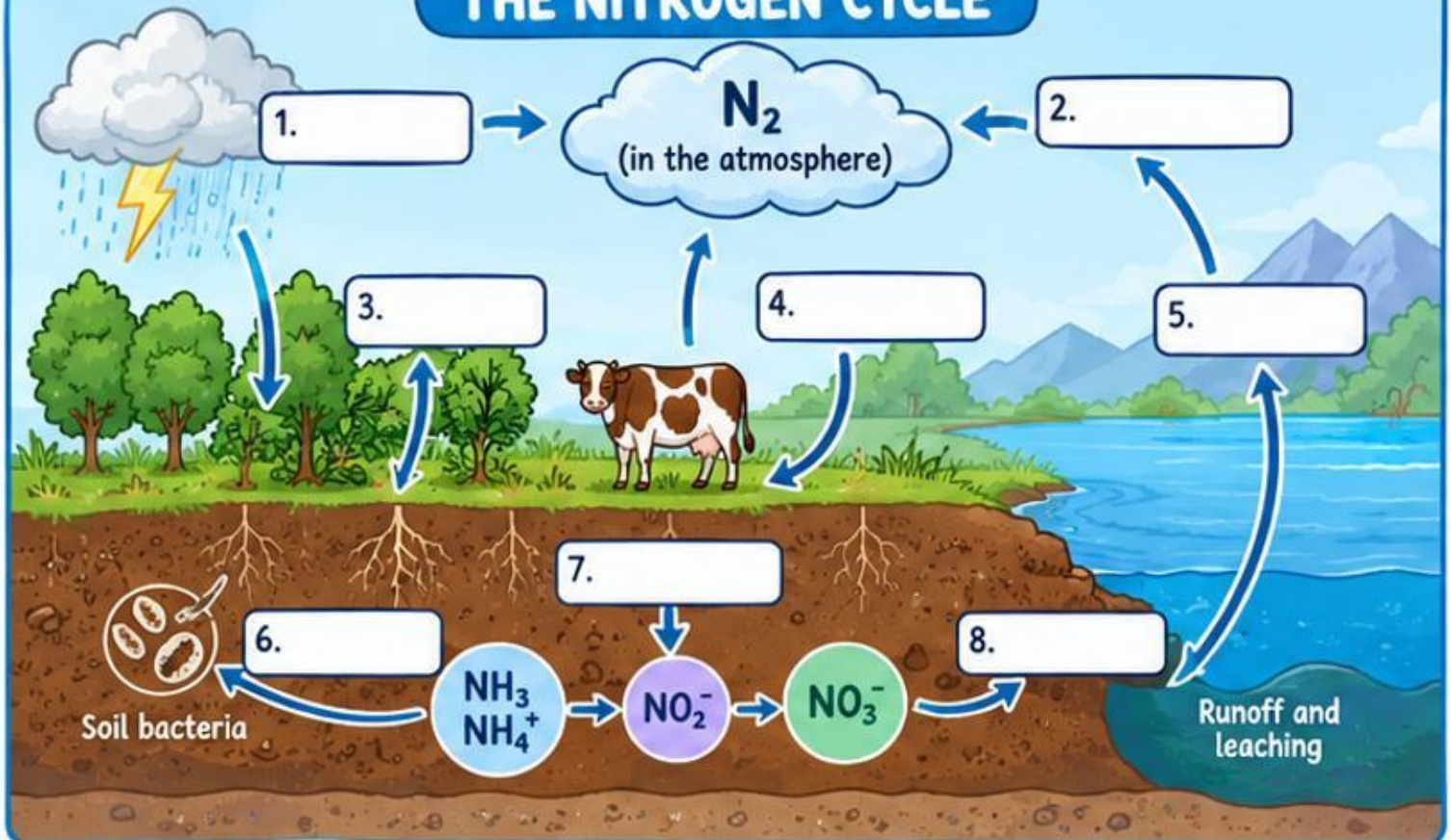
1. \_\_\_\_\_ 2. \_\_\_\_\_

3. How can human activities affect the carbon cycle?

\_\_\_\_\_  
\_\_\_\_\_



# THE NITROGEN CYCLE



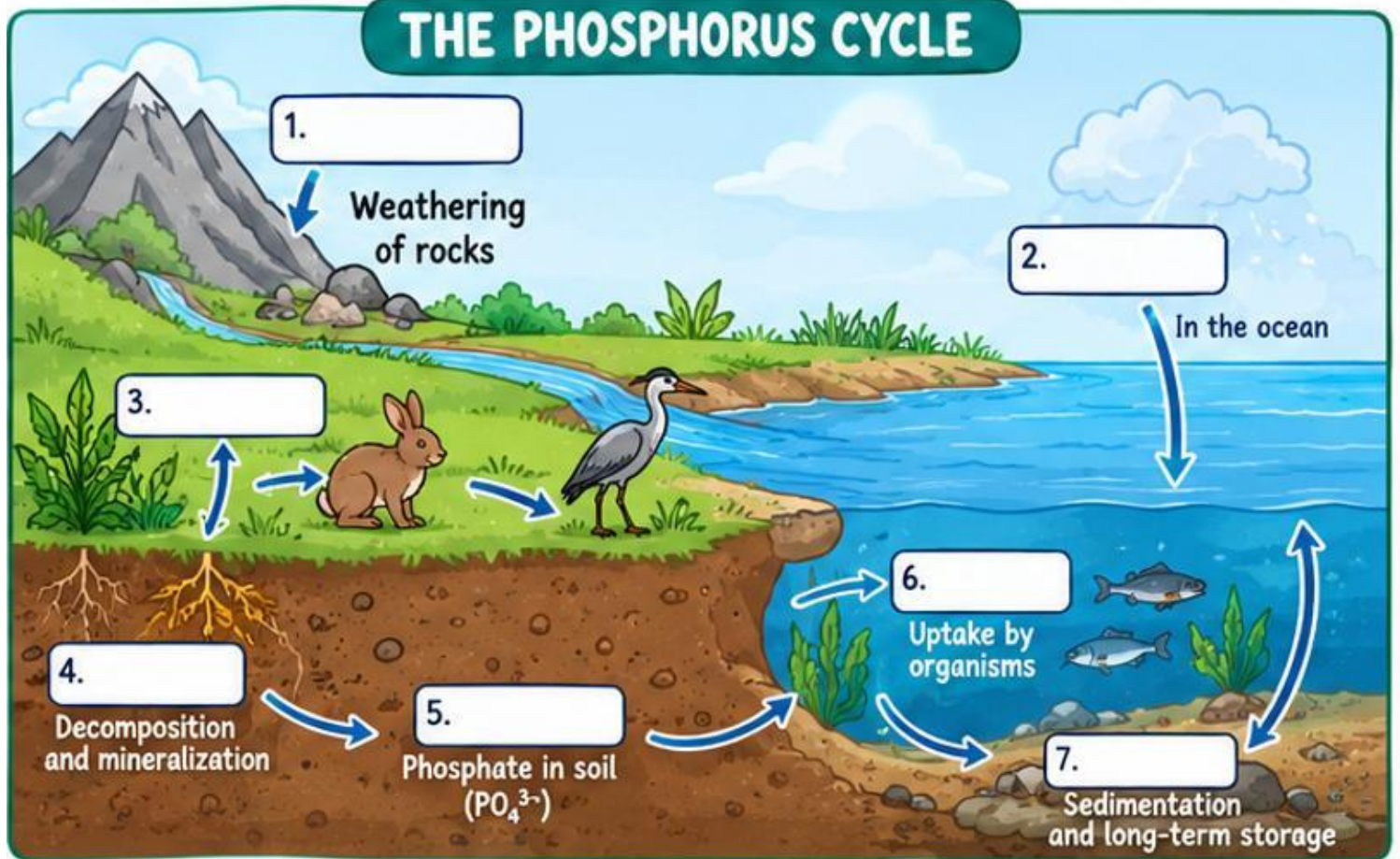
## WORD BANK – NITROGEN CYCLE

- Nitrogen fixation
- Assimilation
- Denitrification
- Atmospheric nitrogen ( $N_2$ )
- Nitrification
- Ammonification (decomposition)
- Runoff and leaching

### A. Answer the questions about the nitrogen cycle.

1. What is the main form of nitrogen in the atmosphere? \_\_\_\_\_
2. Which process converts nitrogen from the atmosphere into a form that plants can use?  
\_\_\_\_\_
3. Name one way nitrogen can return to the atmosphere. \_\_\_\_\_
4. Why is the nitrogen cycle important for living things? \_\_\_\_\_  
\_\_\_\_\_

# THE PHOSPHORUS CYCLE



## WORD BANK – PHOSPHORUS CYCLE

- Weathering of rocks
- Uptake by organisms
- Decomposition and mineralization
- Phosphate in soil ( $\text{PO}_4^{3-}$ )
- Sedimentation and long-term storage
- In the ocean

### B. Answer the questions about the phosphorus cycle.

1. Where is most of the phosphorus found? \_\_\_\_\_
2. How does phosphorus get from rocks to the soil? \_\_\_\_\_
3. What is the role of decomposers in the phosphorus cycle? \_\_\_\_\_
4. Why is the phosphorus cycle important for ecosystems and for humans? \_\_\_\_\_  
\_\_\_\_\_