

Pond and Forest Connections

Find living and nonliving parts and the relationships that link them.

3.5 "The student will investigate and understand that aquatic and terrestrial ecosystems support a diversity of organisms. Key ideas include ecosystems are made of living and nonliving components of the environment..."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline each living component, circle each nonliving component, and write 1, 2, and 3 beside three sentences that show organisms depending on or affecting one another.

Two Places, Many Connections

- ① At the edge of a pond, an aquatic ecosystem holds water, mud, sunlight, and air. These nonliving parts help living things survive. Algae grow in the water. Tiny snails scrape algae from rocks. A frog eats some snails, and a heron may catch the frog. Plants along the bank give insects places to rest and lay eggs.
- ② Nearby, a forest is a terrestrial ecosystem, or one found on land. Soil, rain, rocks, sunlight, and air are nonliving components. Oak trees, mushrooms, ants, squirrels, and foxes are living components. Squirrels use oak trees for acorns and shelter. Foxes hunt small animals. Mushrooms break down dead leaves, returning materials to the soil where plants can use them.
- ③ Both ecosystems have living and nonliving components that work together. A pond needs water for algae and animals. A forest needs soil for tree roots and for mushrooms that break down leaves. If a long dry time lowers the pond water, algae may have less space to grow. Then snails and frogs may have less food. A change to one part can affect many organisms.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 Name two nonliving components in the pond ecosystem.

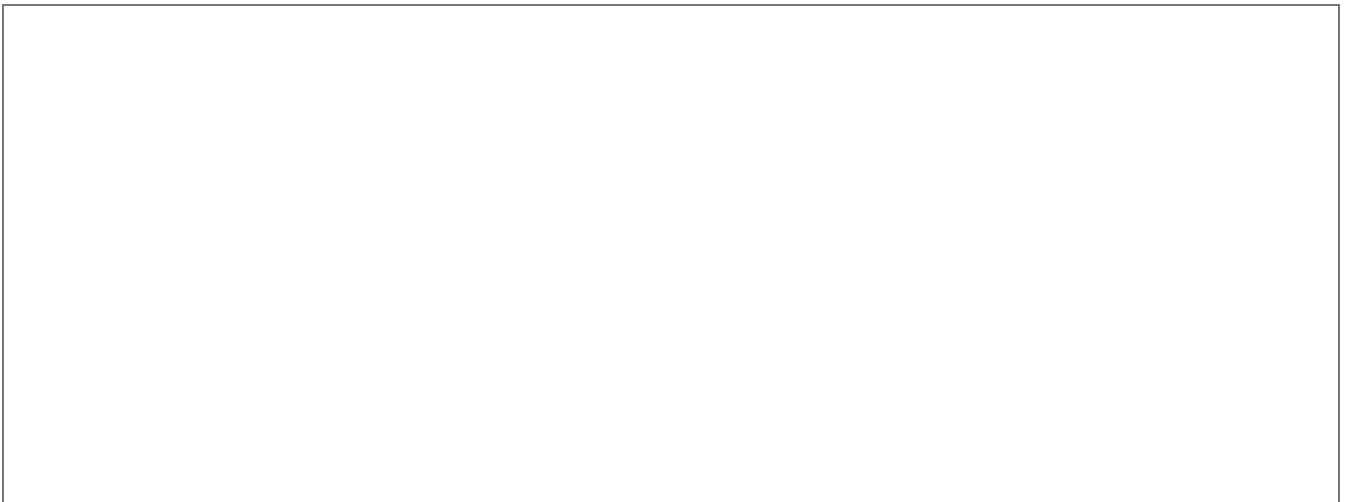
2 How do squirrels depend on oak trees in the forest?

3 What do mushrooms do, and how does this help plants?

4 Explain what may happen after a long dry time lowers the pond water.

3 YOUR TURN _____ Your own words

Draw an ecosystem of your choice. Label three living components and two nonliving components, and draw arrows to show two relationships among organisms. Then write one sentence telling how one nonliving component helps an organism.



PART 1 • READ AND MARK

Underline each living component, circle each nonliving component, and write 1, 2, and 3 beside three sentences that show organisms depending on or affecting one another. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	Name two nonliving components in the pond ecosystem.	Any two: water, mud, sunlight, or air.
2	How do squirrels depend on oak trees in the forest?	Squirrels use oak trees for acorns and shelter.
3	What do mushrooms do, and how does this help plants?	Mushrooms break down dead leaves. This returns materials to the soil that plants can use.
4	Explain what may happen after a long dry time lowers the pond water.	Algae may have less space to grow. Then snails and frogs may have less food.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Drawing labels: seaweed, crab, small fish, water, rocks, sunlight. Arrows show seaweed to crab and crab to small fish. Water gives the seaweed a place to grow.

Accept accurate aquatic or terrestrial ecosystems with three living labels, two nonliving labels, and two sensible organism relationships. Accept a sentence that correctly explains how a nonliving component supports a living organism.