



# Ecosystems

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

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

Grade: Grade 5

## Part A: Multiple Choice

Circle the best answer for each question.

1. A disease kills most of the rabbits in a meadow ecosystem. What is the most likely effect on the fox population?

- A) Fox numbers would increase because there is less competition.
- B) Fox numbers would decrease because they lost a major food source.
- C) Fox numbers would stay the same because they can eat grass instead.
- D) Fox numbers would increase because the disease makes rabbits easier to catch.

2. A new factory begins releasing warm water into a lake. How would this most likely affect the lake ecosystem?

- A) All fish would grow larger because warm water helps them digest food faster.
- B) Some organisms that need cool water could die while warm-water species might thrive.
- C) The ecosystem would not change because water temperature does not affect organisms.
- D) All plants in the lake would grow faster because warmer water has more nutrients.

3. Why would removing all the decomposers from a forest ecosystem cause the greatest damage?

- A) Predators at the top of the food chain would have nothing to eat.
- B) Dead matter would build up and nutrients would stop cycling back into the soil for plants.
- C) All the trees would immediately die without decomposers living near their roots.
- D) Herbivores would run out of food because decomposers are their main prey.

4. An invasive plant species grows faster than native plants and takes over a field. Which effect is most likely?

- A) Animals that depended on native plants for food or shelter would decline in number.
- B) The soil would become richer because the invasive plant adds extra nutrients.
- C) Predators in the area would increase because the new plant attracts more prey.
- D) Nothing would change because all plants provide the same resources to animals.

## Part B: Fill in the Blank

Write the correct answer on each line.

1. When one species is removed from a food web, other species that \_\_\_\_\_ on it are affected.
2. An \_\_\_\_\_ species is a non-native organism that harms the ecosystem it enters.

**Part A: Multiple Choice**

Circle the best answer for each question.

1. A disease kills most of the rabbits in a meadow ecosystem. What is the most likely effect on the fox population?

- A) Fox numbers would increase because there is less competition.
- B) Fox numbers would decrease because they lost a major food source.**
- C) Fox numbers would stay the same because they can eat grass instead.
- D) Fox numbers would increase because the disease makes rabbits easier to catch.

2. A new factory begins releasing warm water into a lake. How would this most likely affect the lake ecosystem?

- A) All fish would grow larger because warm water helps them digest food faster.
- B) Some organisms that need cool water could die while warm-water species might thrive.**
- C) The ecosystem would not change because water temperature does not affect organisms.
- D) All plants in the lake would grow faster because warmer water has more nutrients.

3. Why would removing all the decomposers from a forest ecosystem cause the greatest damage?

- A) Predators at the top of the food chain would have nothing to eat.
- B) Dead matter would build up and nutrients would stop cycling back into the soil for plants.**
- C) All the trees would immediately die without decomposers living near their roots.
- D) Herbivores would run out of food because decomposers are their main prey.

4. An invasive plant species grows faster than native plants and takes over a field. Which effect is most likely?

- A) Animals that depended on native plants for food or shelter would decline in number.**
- B) The soil would become richer because the invasive plant adds extra nutrients.
- C) Predators in the area would increase because the new plant attracts more prey.
- D) Nothing would change because all plants provide the same resources to animals.

**Part B: Fill in the Blank**

Write the correct answer on each line.

1. When one species is removed from a food web, other species that depend on it are affected.
2. An invasive species is a non-native organism that harms the ecosystem it enters.