



# Food Webs and Energy

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

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

Grade: Grade 4

## Part A: Multiple Choice

Circle the best answer for each question.

1. If ten thousand units of energy are available in the producers, about how much energy reaches the secondary consumers?

- A) 10,000 units
- B) 1,000 units
- C) 100 units
- D) 10 units

2. Which statement best explains why energy cannot be recycled in a food web?

- A) Animals store all the energy they eat
- B) Energy is used up and lost as heat at each level
- C) Producers create unlimited energy from the sun
- D) Decomposers send energy back to producers

3. A pond ecosystem has algae, tadpoles, fish, and herons. An oil spill kills most of the algae. What happens first?

- A) Herons have more food available
- B) Tadpole populations decrease because they lose their food source
- C) Fish populations increase rapidly
- D) Decomposer populations vanish immediately

4. Which organism would have the MOST energy available to it in a grassland food web?

- A) eagle
- B) snake
- C) grasshopper
- D) grass

## Part B: Fill in the Blank

Write the correct answer on each line.

1. Unlike nutrients, energy does not \_\_\_\_\_ through an ecosystem.
2. A \_\_\_\_\_ predator sits at the top of the food web with no natural enemies.
3. Organisms use most of the energy they consume for growth, movement, and maintaining body \_\_\_\_\_.
4. When one food source disappears, animals that eat many types of food can \_\_\_\_\_ more easily.
5. The process by which dead organisms are broken down into simpler substances is called \_\_\_\_\_.

**Part A: Multiple Choice**

Circle the best answer for each question.

- |   |   |
|---|---|
| <p>1. If ten thousand units of energy are available in the producers, about how much energy reaches the secondary consumers?</p> <ul style="list-style-type: none"><li><input type="radio"/> A) 10,000 units</li><li><input type="radio"/> B) 1,000 units</li><li><input checked="" type="radio"/> C) 100 units</li><li><input type="radio"/> D) 10 units</li></ul>   | <p>2. Which statement best explains why energy cannot be recycled in a food web?</p> <ul style="list-style-type: none"><li><input type="radio"/> A) Animals store all the energy they eat</li><li><input checked="" type="radio"/> B) Energy is used up and lost as heat at each level</li><li><input type="radio"/> C) Producers create unlimited energy from the sun</li><li><input type="radio"/> D) Decomposers send energy back to producers</li></ul> |
| <p>3. A pond ecosystem has algae, tadpoles, fish, and herons. An oil spill kills most of the algae. What happens first?</p> <ul style="list-style-type: none"><li><input type="radio"/> A) Herons have more food available</li><li><input checked="" type="radio"/> B) Tadpole populations decrease because they lose their food source</li><li><input type="radio"/> C) Fish populations increase rapidly</li><li><input type="radio"/> D) Decomposer populations vanish immediately</li></ul> | <p>4. Which organism would have the MOST energy available to it in a grassland food web?</p> <ul style="list-style-type: none"><li><input type="radio"/> A) eagle</li><li><input type="radio"/> B) snake</li><li><input type="radio"/> C) grasshopper</li><li><input checked="" type="radio"/> D) grass</li></ul>   |

**Part B: Fill in the Blank**

Write the correct answer on each line.

1. Unlike nutrients, energy does not cycle through an ecosystem.
2. A top predator sits at the top of the food web with no natural enemies.
3. Organisms use most of the energy they consume for growth, movement, and maintaining body temperature .
4. When one food source disappears, animals that eat many types of food can survive more easily.
5. The process by which dead organisms are broken down into simpler substances is called decomposition .