

# Ecosystems & Food Webs

Fill in each part when its number appears on the slide.

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

## PART 1 · TARGET

I can model how energy and matter move through an ecosystem and predict what happens when part of it changes.

## PART 2 · WARM-UP

1. Name two things a plant needs to make its own food.

\_\_\_\_\_

2. Write a food chain with three living things from an Indiana forest.

\_\_\_\_\_

3. What do you think happens to a leaf after it falls to the ground?

\_\_\_\_\_

## PART 3 · PREDICTION

In a forest, a hawk eats a snake that ate a mouse that ate seeds. Where did the hawk's energy START?

Circle one: ☐ The mouse ☐ The seeds ☐ The Sun

## PART 4 · VOCABULARY

| Word       | Meaning |
|------------|---------|
| Producer   |         |
| Consumer   |         |
| Decomposer |         |
| Food web   |         |

## PART 5 · ENERGY STARTS WITH THE SUN

\_\_\_\_\_ make their own food from \_\_\_\_\_. This process is called \_\_\_\_\_.

Check: Which is a producer?

Circle one: (A) Oak tree (B) Deer (C) Mushroom (D) Hawk

## PART 6 · ARROWS SHOW ENERGY FLOW

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Arrows point in the direction \_\_\_\_\_ flows: from the eaten to the \_\_\_\_\_.

Check: Which food chain is drawn correctly?

Circle one: (A) Bass -> mayfly -> algae (B) Mayfly -> algae -> bass (C) Algae <- mayfly <- bass (D)  
Algae -> mayfly -> bass

## PART 7 · CONSUMERS AND DECOMPOSERS

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\_\_\_\_\_ eat only plants. \_\_\_\_\_ return nutrients to the \_\_\_\_\_.

Check: What would happen without decomposers?

Circle one: (A) Nothing would change (B) Dead matter would pile up and soil would lose nutrients (C)  
Plants would grow faster (D) There would be more sunlight

## PART 8 · FOOD WEBS CONNECT

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In a food web, a change in one \_\_\_\_\_ affects the others connected to it.

Check: Snakes eat mice. If snakes disappear, what happens to mice first?

Circle one: (A) Mice increase (B) Mice decrease (C) Mice stay the same (D) Mice become producers

## PART 9 · WORKED EXAMPLE

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Final answer from the example: \_\_\_\_\_

## PART 10 · WE DO

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Food chain: grass -> grasshopper -> frog -> snake. A drought kills much of the grass. Predict what happens to the snakes.

Answer: \_\_\_\_\_

## PART 11 · YOU DO

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In a forest, owls eat mice and mice eat seeds. A disease kills most owls. What happens to the seeds first?

Circle one: (A) More seeds, because mice disappear (B) No change (C) Seeds turn into decomposers  
(D) Fewer seeds, because more mice eat them

## PART 12 · WORK TIME: HOOSIER HABITAT HIKE

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Write each code piece as you earn it: Stop 1: \_\_\_\_ Stop 2: \_\_\_\_ Stop 3: \_\_\_\_ Stop 4: \_\_\_\_ Stop 5: \_\_\_\_

Final code: \_\_\_\_\_

## PART 13 · WRAP-UP

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Was your prediction in Part 3 right? One thing I learned today:

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