

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

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

_____ 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

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

Final answer from the example: _____

PART 10 · WE DO

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

Answer: _____

PART 11 · YOU DO

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: WHO CRASHED THE FOOD WEB?

Write each code piece as you earn it: File 1: ____ File 2: ____ File 3: ____ File 4: ____ File 5: ____

Final code: _____

PART 13 · WRAP-UP

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