

Energy in Ecosystems – Post-Assessment

WHAT DID YOU LEARN?

Match the following words to their definitions:

1 **Decomposer**

2 **Ecosystem**

3 **Food Web**

4 **Habitat**

5 **Invasive Species**

6 **Organism**

7 **Photosynthesis**

A The place where a plant or animal lives.

B An individual plant, animal, or other life form.

C The way that plants make their food.

D An organism that eats dead plant or animal matter.

E A community of plants and animals, and the nonliving things that affect them.

F A plant or animal that causes harm when it enters a new ecosystem.

G A model showing who eats what in an ecosystem.

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8

Draw a tree and show 5 different animals that might use it for some or all of their habitat.

9

Write the name of each animal you drew, and describe how it uses the tree. Examples: for food, for shelter, or for having young.

Animal	How it uses the tree

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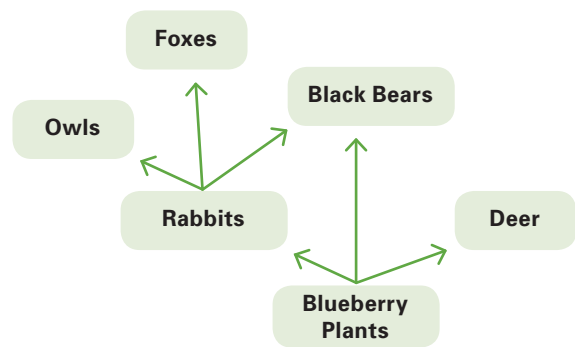
10 Imagine that you drink a glass of milk. Which food chain shows the transfer of energy to you?

- a. Sun → Grass → Person → Cow
- b. Cow → Person → Sun → Grass
- c. Sun → Grass → Cow → Person
- d. Person → Grass → Cow → Sun

11 What do the arrows in the food web show?

- a. They show which way the animal moves.
- b. They point to the thing that is bigger.
- c. They show who eats what.
- d. They don't show anything.

Below is a forest food web.



12 What would happen in the short term in this forest food web if there were no black bears anymore?

- a. There would be more rabbits.
- b. There would be fewer rabbits.
- c. There would be fewer blueberry plants.
- d. There would be fewer deer.

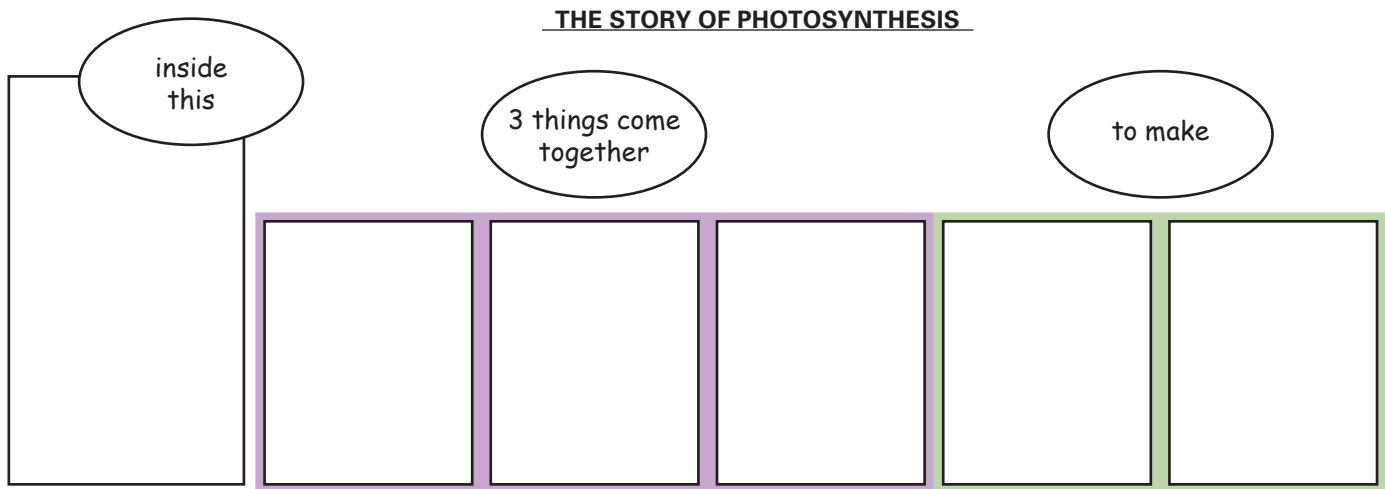
13 Which of the following is necessary for photosynthesis to happen?

- a. Plant fertilizer
- b. Sunlight
- c. A camera
- d. None of the above

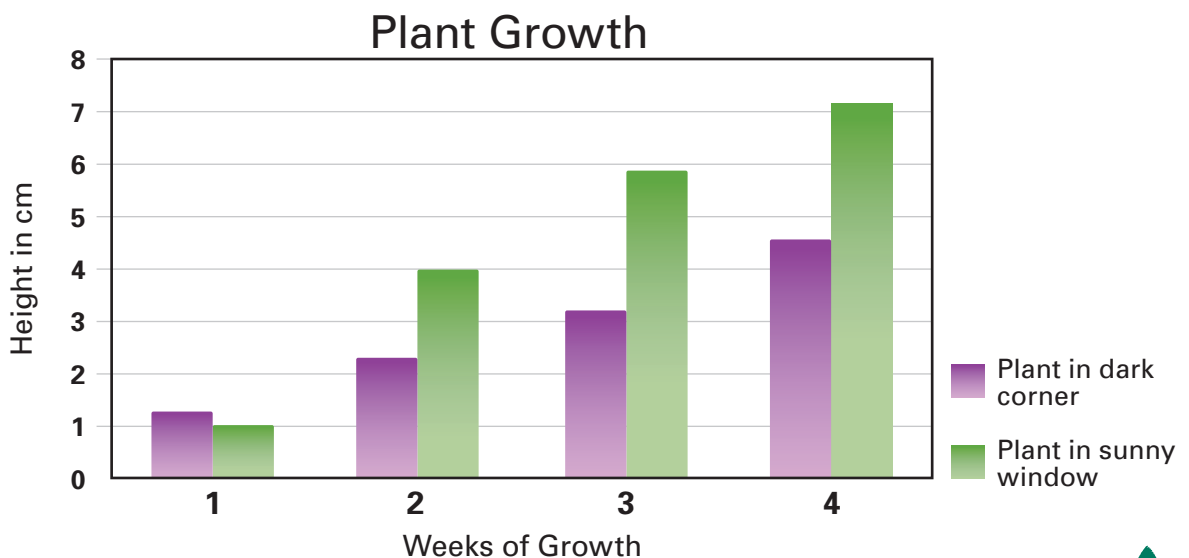
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14 Create a cartoon telling the story of photosynthesis. Place these elements in the boxes below to show what is needed and what is made in photosynthesis.

 Oxygen
  Water
  Sunlight
  Sugars
  Carbon Dioxide
  Leaf



Kai and Dakota conduct an investigation on plants. They place one of the plants in a bright, sunny window and one in a dark corner of their classroom. They measure their plants every week. The graph below shows their results. Answer the following questions about the investigation.



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15 Which plant grew the most between Week 1 and Week 4?

- a. The plant in the sunny window.
- b. The plant in the dark corner.
- c. They both grew the same amount.

16 Why did Kai and Dakota use the same plants, the same size pots, and the same amounts of water for both plants?

- a. It's the only kind of plants and pots they have.
- b. They want to conduct a fair test—with only one thing different.
- c. They want to make things easy.

17 What can you conclude from this investigation?

- a. The amount of sunlight does not affect how much a plant grows.
- b. Plants always grow the same amount in a week's time.
- c. A plant grows more in bright sun than in the dark.

The tree rings below show the growth of two different trees from the same forest.



Tree A



Tree B

Circle True or False:

18 Tree A is older than Tree B.

True False

19 Tree A received more sunlight, water, and nutrients than Tree B.

True False

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Choose the best response:

20 Invasive species usually

- a. Produce lots of seeds or eggs.
- b. Can live in lots of different conditions.
- c. Grow quickly.
- d. All of the above.

21 When invasive species arrive in a new area, they

- a. Fit into the existing food web.
- b. Die because they cannot survive.
- c. Cause the number of native species to decrease.
- d. All of the above.

22 There are many things people can do to keep invasive species from spreading. Which is NOT one of them?

- a. Grow only non-invasive plants in their gardens.
- b. Wash fishing gear and boats after using them.
- c. Release aquarium plants and fish into the local stream or pond.
- d. Clean boots and shoes before hiking to a new area.

23 What is the most important thing you learned about energy in ecosystems in this unit? Write your answer in 2 to 3 sentences.
