

CHAPTER REVIEW

Chapter 5

Cycling of Matter and Energy

I. Vocabulary Review

Circle the word that does not belong in each group of words.

1. autotroph, producer, heterotroph, plant
2. herbivore, producer, heterotroph, decomposer
3. fungi, heterotroph, plant, consumer
4. carnivore, heterotroph, consumer, producer

Match each item in Column I with the most appropriate item in Column II. Write the letter for that item in the blank at the left.

- | Column I | Column II |
|---|------------------|
| _____ 5. physical location in which an organism lives | a. transpiration |
| _____ 6. includes food and other conditions necessary for a species' survival | b. autotroph |
| _____ 7. close, long-term relationship between two or more species | c. habitat |
| _____ 8. evaporation of water from plant leaves | d. food chain |
| _____ 9. model showing how energy flows through ecosystems | e. niche |
| _____ 10. organism that can manufacture its own food | f. symbiosis |

II. Concept Review

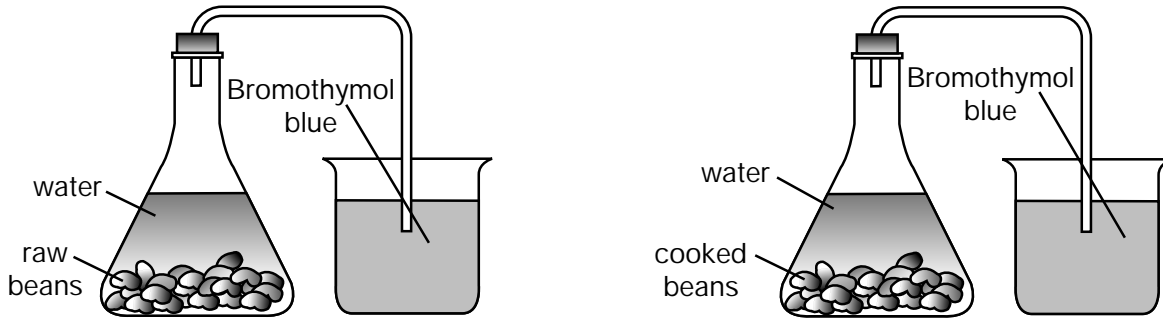
In the blank at the left, write the letter of the choice that best completes the statement.

- _____ 11. Energy flows from _____.
 - a. higher to lower trophic level
 - b. autotroph to heterotroph
 - c. top of energy pyramid to bottom
 - d. from consumer to heterotroph
- _____ 12. Autotrophs use carbon dioxide during _____.
 - a. cellular respiration
 - b. transpiration
 - c. photosynthesis
 - d. evaporation
- _____ 13. After water evaporates, it enters the atmosphere as _____.
 - a. rain
 - b. condensed gas
 - c. precipitation
 - d. water vapor
- _____ 14. Heterotrophs get nitrogen by _____.
 - a. inhaling gaseous nitrogen
 - b. using nitrogen "fixed" by soil bacteria
 - c. eating autotrophs
 - d. the recycling action of decomposers
- _____ 15. First-order consumers are _____.
 - a. herbivores
 - b. omnivores
 - c. carnivores
 - d. autotrophs

Chapter Review 5 (continued)

III. Skills/Process Review

Use the figure to answer questions 16–19.



16. Fill in the lettered spaces in the table to show the color of the indicator, bromothymol blue. A green (G) solution indicates no carbon dioxide has been released, and a yellow (Y) solution shows the presence of carbon dioxide.

	Time	
	0	24 hr
Raw beans	a.	b.
Cooked beans	c.	d.

17. Explain what is being demonstrated in the figure. _____

18. What was the control for this experiment? Explain. _____

19. What does this experiment show? _____

IV. Feature Review

20. **Science and Society: Of Moondust, Catfish, and Kudzu** Should the United States maintain restrictions that prevent the introduction of exotic species? Explain your point of view. _____
