

Concept Mapping

Page 48 • Organisms and Energy

1. form the base of all ecological pyramids, make organic molecules from inorganic molecules, producers
2. are described by their energy source, part of food chains and food webs
3. carnivores, consumers, detritivores, herbivores, some absorb nutrients from dead organisms, some eat other organisms

Study Guide

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1. yes
2. no
3. no
4. yes
5. E
6. A
7. D
8. B
9. C
10. Involves Biotic Factors
11. Involves Abiotic Factors, Involves Biotic Factors
12. Involves Abiotic Factors, Involves Biotic Factors
13. Involves Biotic Factors
14. Involves Abiotic Factors, Involves Biotic Factors
15. Involves Abiotic Factors, Involves Biotic Factors

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1. E
2. F
3. B
4. A
5. D
6. C
7. producer
8. herbivore
9. omnivore
10. carnivore
11. secondary consumers

12. primary consumers
13. producers
14. biomass
15. An ecological pyramid, which represents the amount of energy in each trophic level of an ecosystem, is smaller on top because energy is lost as it flows from one level to the next.

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1. 1
2. 4
3. 2
4. 3
5. Carbon
6. cycles

Note: Student answers for questions 7 and 8 are interchangeable.

7. photosynthesis
8. respiration

Note: Student answers for questions 9–11 are interchangeable.

9. atmosphere
10. water
11. living organisms
12. proteins
13. atmosphere
14. nitrogen fixation
15. plants
16. Consumers
17. urinate
18. decay
19. Decomposers
20. ammonia
21. denitrification
22. soil and groundwater
23. short-term cycle
24. new rock
25. long-term cycle