Name: _____Date: _____Per: _____

Test IS2: Matters that Cycle Study Guide

DIRECTIONS: Use your science notes to complete this worksheet.

Notes: Photosynthesis

1. What do all living things need? _____
2. What is photosynthesis? _____
   _____
3. What kinds of living things can do photosynthesis? _____
4. What three things go into photosynthesis? _____
   _____
5. What two things come out of photosynthesis? _____
6. Why can't animals do photosynthesis? _____
   _____

Notes: Cellular Respiration

7. What is cellular respiration? _____
   _____
8. What two things go into cellular respiration? _____
9. What three things come out of cellular respiration? _____
   _____
10. True or False: Both animals AND plants can do cellular respiration. _____
11. Summarize the Law of Conservation of Matter: _____
    _____
    _____

Notes: Food Webs

12. How is a food web different from a food chain? _____
    _____
    _____
13. Explain the following terms:
    a. Decomposer: _____
    b. Producer: _____
    c. Primary Consumer: _____
    d. Secondary Consumer: _____
    e. Tertiary Consumer: _____
    f. Apex Predator: _____
14. Summarize the Rule of 10% (or, the reason the trophic level model is shaped like a pyramid):
    _____
    _____
    _____

Notes: Ecological Interactions

15. Explain the following terms:
    a. Competition: _____
    b. Predation: _____

c. Mutualism: _____

d. Commensalism: _____

e. Parasitism: _____

16. Which three forms of ecological interaction listed above are considered forms of **symbiosis**?

_____

The Carbon Cycle

17. Using your diagram, describe the pathways that carbon takes in the environment:

    a. Carbon in the atmosphere is absorbed through photosynthesis into _____. From there, it can be eaten and put into a _____ , it can die and be broken down by _____ , or it can be buried and turn into a _____ . When carbon goes into a consumer, it is breathed out during respiration and goes back to the _____. When the consumer dies, the carbon gets broken down by _____. It may also become buried and turn into a _____. Fossil fuels are burned which releases carbon back into the _____.

Add arrows to show the path of carbon throughout the environment.