

Unit 5: ECOLOGY REVIEW SHEET

I. Matching

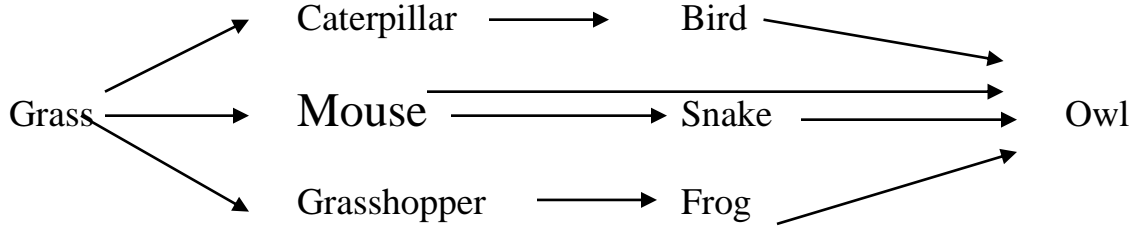
Match the following terms with the correct statement. Each statement may be used only once.

- | | |
|-------------------------------|--|
| 1. _____ Heterotroph | A. One organism benefits without harming the other |
| 2. _____ Secondary Succession | B. Maintaining a natural balance on earth |
| 3. _____ Ecology | C. Study of organisms and their environment |
| 4. _____ Prey | D. Gradual replacement of one community by another |
| 5. _____ Carnivore | E. A relationship in which both organisms benefit |
| 6. _____ Autotroph | F. Organisms that cannot make their own food |
| 7. _____ Parasitism | G. A relationship in which one organism benefits but harms the other |
| 8. _____ Commensalism | H. Organisms that can make their own food |
| 9. _____ Herbivore | I. An organism that hunts |
| 10. _____ Mutualism | J. Organisms that eats only meat |
| 11. _____ Decomposer | K. Organism that breaks down dead material |
| 12. _____ Omnivore | L. Any biotic factor that restricts distribution of organisms |
| 13. _____ Predator | M. Organism that eats both plant and animals |
| 14. _____ Limiting Factor | N. Organism that is hunted |
| 15. _____ Homeostasis | O. An organism that eats only plants |

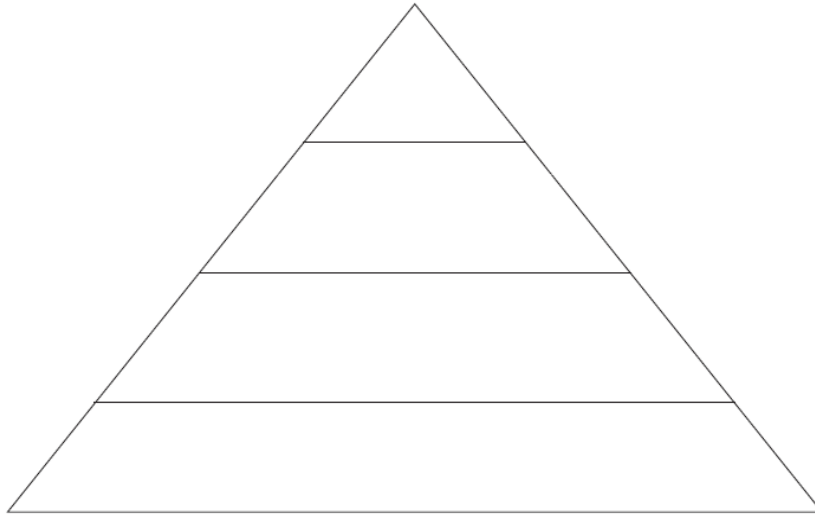
In the space to the left, write the word or phrase that includes the rest.

- _____ 16. trophic level, food web, food chain
- _____ 17. parasitism, commensalism, mutualism, symbiosis
- _____ 18. organism, ecosystem, population, community
- _____ 19. ecosystems, biotic factors, biosphere, abiotic factors
- _____ 20. omnivores, consumers, carnivores, herbivores
- _____ 21. evaporation, precipitation, water cycle, transpiration
- _____ 22. little rainfall, plants with waxy coats, desert, reptiles
- _____ 23. low temp., little precipitation, tundra, permafrost

Use the following diagram to answer questions 24-25.



24. What is the producer in the food web above? _____
25. Energy flows from the mouse to the _____ and _____
26. Label the four tiers of the energy pyramid with the correct trophic level (producers, primary consumers, secondary consumers, and tertiary consumers). Be sure to include arrows to indicate energy loss and energy transfer.



Based on the descriptions in questions 27-30, write E for Exponential Growth and L for Logistic Growth.

- _____ 27. This type of growth tends to level off upon the carrying capacity.
- _____ 28. This type of growth has a period of steady growth.
- _____ 29. This type of growth is more realistic and true
- _____ 30. This type of growth keeps growing forever if unchecked

III. SHORT ANSWER

31. Explain what the carrying capacity is in a logistic growth curve.

Name _____ Date _____ Biology Period ____

32. List the 6 levels of biological organization from **general to specific**.

33. Explain the difference between a niche and habitat.

Niche:

Habitat:

34. List 5 types of symbiotic relationships and give examples of each.

1. example:

2. example:

3. example:

4. example:

5. example:

35. Compare and contrast a food chain and a food web.

Food Chain:

Food Web:

36. Compare and contrast primary and secondary succession.

Primary:

Secondary:

37. Compare and contrast density-dependent and density-independent factors.

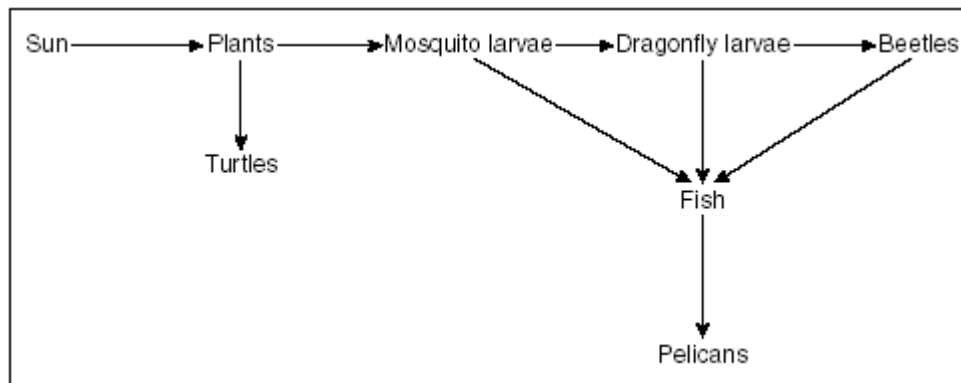
Density- dependent:

Density- independent:

38. What is the main cause of ozone depletion?

39. What is the main cause of the greenhouse effect?

40. Contrast immigration and emigration. Which one causes the size of a population to increase?



41. If all of the mosquito larvae are removed from the food web above, which populations will decrease?

42. If the ecosystem above was contaminated with DDT, a harmful chemical, which population would contain the highest *concentration* of DDT?

43. Explain how the availability of resources affects population growth.

44. In the Amazon Jungle, the cappuccino monkey thrives in the high trees of the Peruvian area of the jungle. In the high trees, it can feed on hazelnuts and scavenge for food along the jungle floor. It also is food for many predators such as jaguars.

What would be the monkey's habitat?

Name _____ Date _____ Biology Period ____

What would be the monkey's niche?