Ecology Unit Review Sheet

1. Define ecology.
2. Define abiotic.
3. Give example of abiotic factors.
4. Define biotic.
5. Give examples of biotic factors.
6. List the 6 levels of organization of ecology. Describe each level.
7. What is the difference between habitat and niche?
8. A squirrel lives in a tree in Charleston and eats acorns. He gathers leaves for a nest. Describe his habitat. Describe his niche.
9. Describe commensalism.
10. Give an example of commensalism.
11. Describe mutualism.
12. Give an example of mutualism.
13. Describe parasitism.
14. Give an example of parasitism.
15. What type of organisms are capable of using and storing energy from the sun?
16. How must heterotrophs obtain energy?
17. How do saprophytes obtain energy?
18. Give an example of a saprophyte?
19. How do herbivores obtain energy?
20. Give an example of an herbivore?
21. How do carnivores obtain energy?
22. Give an example of a carnivore?
23. What are the two types of carnivores?
24. Give an example of each type of carnivore.
25. How do omnivores obtain energy?
26. Give an example of an omnivore?
27. What is the difference between a food chain and a food web?
28. Some \_\_\_\_\_\_\_\_\_\_ is lost at each trophic level.
29. The primary source of energy for all things is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
30. A rabbit eats a carrot and a fox eats the rabbit. What level consumer is the rabbit? What level consumer is the fox?
31. Members of the same trophic level are the same numbers of steps away from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
32. If the primary producers stored 1000 units of energy, how many are stored in the tertiary consumer level?
33. If the primary producers stored 1000 units of energy, how many have been lost by the time you get to the tertiary consumer level?
34. Why are the number of trophic levels limited?
35. What trophic level has the most organisms?
36. What trophic level has the least number of organisms?
37. Why would the few animals at the highest trophic level have a high concentration of a contaminant (such as pesticides) when the food they eat from other trophic levels have lower levels?
38. Energy \_\_\_\_\_\_ through an ecosystem and Nutrients \_\_\_\_\_\_\_\_\_\_ in an ecosystem.
39. What are the primary nutrient cycles?
40. Where are three places water is stored? The process of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ moves water from lakes, rivers, and oceans to the atmosphere.
41. The process of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ moves water from plants and trees to the atmosphere.
42. The process of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ leads to the formation of clouds.
43. Precipitation moves water in the form of \_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_.
44. The process of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ returns water to the bodies that store it.
45. Water that does not runoff may be absorbed into the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
46. Photosynthesis and cellular respiration are the basis of the \_\_\_\_\_\_\_\_ cycle.
47. In what form does carbon exist in the atmosphere?
48. Plants use CO2 to build \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
49. Heterotrophs obtain energy-rich carbon molecules by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
50. Carbon is returned to the atmosphere by \_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_.
51. What are the three types of ecosystems?
52. What is succession?
53. The first species to populate an area is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
54. The mature community that is developed after community becomes stable is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
55. When organisms colonize an area that once had life that was wiped out is called\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
56. One of the main differences in secondary succession is that the community already has \_\_\_\_\_\_\_\_\_.
57. Populations growing with no limitations show a \_\_\_\_\_\_\_\_\_\_\_ shaped curve called \_\_\_\_\_\_\_\_\_\_\_\_ growth.
58. A population that has grown to its carrying capacity forms a \_\_\_\_\_\_ shaped curve.
59. What are the two types of environmental limitations?
60. Give an example of a density-dependent factor.
61. Give an example of a density-independent factor.
62. How does population size affect competition?
63. If more people in a population are in the ages of reproduction, the population will grow \_\_\_\_\_\_\_\_\_\_\_.
64. How are the age ranges represented in a population showing a stable size?