Living Things & Transfer of Energy Study Guide

Name Answer Key Class

1. Give an example of a biotic factor in a desert ecosystem.
   camel, lizards, Acacia
2. An organism's habitat must provide all of the following:
   food, water, shelter
3. The nonliving parts of an ecosystem are called
   abiotic
4. The place where an organism lives and that provides the things the organism needs is called its
   Habitat
5. All the different populations that live together in an area make up a(n) community
6. The smallest unit of ecological organization is a single organism.
7. The study of how things interact with each other and with their environment is called
   ecology
8. Give an example of a population?
   all the ~~birds~~ crows in an area
9. List the ~~six~~ 5 levels of ecology from smallest to largest.
   organism, population, community, ecosystem, biosphere
10. Why do ecologists study both biotic and abiotic factors in an ecosystem?
    to understand rely on abiotic factors to live & adapt to the environment
11. Would all fish in a pond be considered a population? Why or why not?
    No because they would need to be the same species it would be the community
12. List five abiotic factors.
    sunlight, soil, water, temperature, wind,
13. What is a carnivore? Give an example.
    eats only meat
    lion

14. What is an herbivore? Give an example.

eats only plants, cow

15. What is an omnivore? Give an example.

eats plants & animals humans

16. Give an example of a decomposer.

fungi

17. Give an example of a scavenger.

hyena, Raccoon, condor

18. What is a producer? Give an example.

creates it own food, autotroph flower, grass

19. What is a consumer? Give an example of a primary (1st level consumer), a secondary (2nd level consumer), and a tertiary (3rd level consumer).

needs to eat for energy

1st eats plants (grasshopper) 2nd eats primary consumer (rat) 3rd eats 2nd consumer (snake)

20. What happens if you remove an organism from an ecosystem?

the ecosystem is out of balance. a

21. Which way are the arrows supposed to point in a food chain and a food web?

toward the flow of energy of what is doing the eating

22. What do the arrows represent in a food chain and a food web?

shows the flow of energy.

23. Define predator.

an animal that preys or hunts others

24. Define prey.

an animal that is hunted

25. Give an example of a predator/prey relationship and label which is the predator and which is the prey.

Cheetah - gazelle

snake - frog

predator - prey

26. What is the source of all energy in an ecosystem?

sun

27. Explain the difference between a food chain and a food web.

food chain follows 1 path

food web shows many paths

28. Which level of an energy pyramid has the most amount of energy? The least amount of energy?

producers / bottom

Top / quaternary consumers

29. What do you do if you break glassware in the lab?

Tell the teacher

30. List 5 lab safety procedures you should always follow in the lab.

- follow directions
- report broken glass/accidents
- Dr not mix chemicals
- Do not eat in lab
- Do not smell items
- wear safety goggles

31. Explain the difference between a graduated cylinder and a beaker.

beaker do not give an accurate measurement

32. List the steps of the scientific method in the correct order and a brief explanation of each.

- State question or identify the problem
- research the problem
- make a Hypothesis
- follow the prodecure
- analyze the data
- state the conclusion

33. Define autotroph. Give an example.

makes it own food, plant energy

34. Define heterotroph. Give an example.

eats its food, Humans

35. Draw a food chain with arrows pointing in the correct direction.

Sun → grass → rabbit → snake