**Science Study Guide**

Ch’s 20 (sections 1-4) and 21 (sections 1-3)

**S7L4. Students will examine the dependence of organisms on one another and their environments.**

a. Demonstrate in a food web that matter is transferred from one organism to another and can recycle between organisms and their environments.

b. Explain in a food web that sunlight is the source of energy and that this energy moves from organism to organism.

c. Recognize that changes in environmental conditions can affect the survival of both individuals and entire species.

d. Categorize relationships between organisms that are competitive or mutually beneficial.

**S7L5. Students will examine the evolution of living organisms through inherited characteristics that promote survival of organisms and the survival of successive generations of their offspring.**

b. Describe ways in which species on earth have evolved due to natural selection.

**\*\*\*\*Know your key terms (vocabulary)! \*\*\*\*\***

1. The part of an ecosystem that refers to where an organism lives and feeds is referred to as its?
2. When all the biotic and abiotic factors in one area are combined it is known as a?
3. Water and soil are what kind of factors in an ecosystem?
4. An Ecologist is…
5. What is the method of estimating that uses multiplying the # of organisms in a small area to find the # in a large area?
6. What type of observation is an ecologist using by studying animal tracks to determine population size?
7. When a group of hyenas break off from their original herd it decreases the size of that herd through the process known as?
8. Population size increases mainly because of the?
9. What factor would prevent population growth if there was a shortage of food?
10. A polar bear having thick fur that allows it to live successfully in its environment is an example of?
11. When ticks feed off another organism it is an example of what type of a symbiotic relationship referred to as?
12. A symbiotic relationship that benefits at least one of the organisms is referred to as?
13. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is when two species struggle to occupy the same niche in an ecosystem.
14. The type of succession that occurs in an area where an ecosystem has been disturbed, but where soil and organisms still exist, is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ succession.
15. Is soil a biotic or abiotic factor?
16. What are three factors that could limit a population’s growth?
17. Nonliving parts of an ecosystem are what kind of factors?
18. \_\_\_\_\_\_\_\_\_\_\_\_\_ is when one organism kills and eats another organism.
19. The study of how things interact with one another and their environment is called?
20. When a tick is living on a horse, the horse is the \_\_\_\_\_\_\_\_.
21. The three types of symbiotic relationships are?
22. The number of individuals in a specific area is the?
23. What is secondary succession?
24. A pioneer species is the…
25. The behaviors and physical characteristics of a species that allow them to live successfully in their environment are known as?
26. When a boa constrictor traps a mouse, the mouse is the \_\_\_\_\_\_\_\_\_\_\_ in this relationship.
27. A late spring freeze that could harm young, tender plants is what kind of factor in an ecosystem?
28. Grass is a \_\_\_\_\_\_\_\_ factor.
29. Population is the…
30. When an animal leaves one area for another it is referred to as what?
31. When an ecologist estimates the population of a species based on reasonable assumptions it is known as a(n)\_\_\_\_\_\_\_\_\_\_\_.
32. The largest population an environment can support is its?
33. What is a producer?
34. What is a consumer?
35. Producers use carbon from (the gas) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to make sugars and starches.
36. A bird eating berries and depositing the seeds in its waste is an example of \_\_\_\_\_\_\_\_\_\_\_.
37. Bacteria and fungi are both classified as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
38. The energy role of a polar bear is classified as a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ because it cannot make its own food.
39. An energy pyramid shows how much energy is available at \_\_\_\_\_\_\_ level of the pyramid.
40. The largest amount of energy is available at the \_\_\_\_\_\_\_\_\_\_\_ of the energy pyramid, while the smallest amount of available energy being at the \_\_\_\_\_\_\_\_\_\_\_\_.
41. A producer is always the first organism shown in a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_.
42. An organism that eats only plants is a \_\_\_\_\_\_\_\_\_\_\_. An organism that eats both plants and meat is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. While an organism that only eats meat is a \_\_\_\_\_\_\_\_\_\_\_\_.
43. Nitrogen fixation is when….
44. A food web shows\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
45. In which process do producers use carbon from carbon dioxide to produce other carbon-containing molecules that will eventually return to the soil?
46. In regards to dispersal the ocean is an example of which limit of dispersal?
47. An organism that can make its own food is classified as a \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
48. Vultures, which feed on the bodies of dead organisms, are \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
49. Dispersal occurs when…..
50. Producers release \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as a result of photosynthesis.