

Ecology STUDY GUIDE

Name: _____

MATCHING: Read each description below. Find the best choice word. Write the letter on the line

All of the words will be used

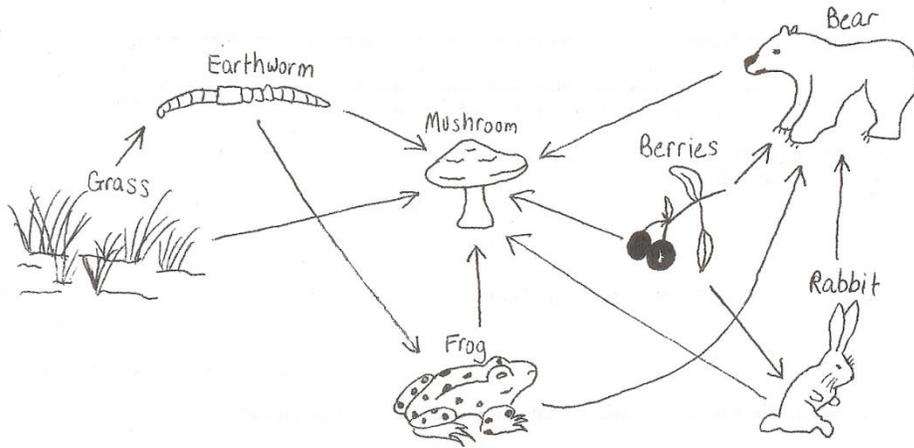
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|--|----------------|
| _____ An organism that can make its own food (photosynthesis). | A. Community |
| _____ A community of organisms and their non-living environment | B. Organism |
| _____ All the populations of different species that live and interact in an area | C. Consumer |
| _____ A group of individuals of the same species that live together in the same area at the same time | D. Mutualistic |
| _____ Anything that can independently carry out life processes | E. Ecosystem |
| _____ Relationship where each organism benefits | F. Population |
| _____ Animals that eat only other meat | G. Producer |
| _____ Organism that must find food and cannot make its own | H. Carnivore |
| _____ Organism that breaks down organic matter into inorganic form and returns nutrients to the system | I. Decomposer |
| _____ Organisms that eat only plants | J. Herbivore |

COMPLETION: To complete the following sentences, choose the correct term from each pair of terms.

1. An organism's environment has two parts, the _____, or living, and the _____, or nonliving. (*biotic* or *abiotic*)
2. A _____ is a group of individuals of the same species that live in the same area at the same time (*community* or *population*)
3. The environment in which an organism lives is its _____, and the role the organism plays in an ecosystem is its _____. (*niche* or *habitat*)

MULTIPLE CHOICE: Write the letter of the best answer on the blank line.

4. _____ "Nature's recyclers" are
 - a. predators
 - b. decomposers
 - c. producers
 - d. omnivores
5. _____ A Remora fish attaches itself to the underside of a shark without harming the shark and eats leftover bits of food from its meal. This relationship is:
 - a. Mutualism
 - b. Commensalism
 - c. Predator and prey
 - d. Parasitism
6. _____ The base (bottom) of a food chain represents which organisms?
 - a. Producers
 - b. Carnivores
 - c. Herbivores
 - d. Scavengers
7. _____ What ecosystem would a bird with a long beak and long legs best be suited for?
 - a. Wetland
 - b. Desert
 - c. Deciduous Forest
 - d. Tropical Rainforest
8. _____ What ecosystem would an organism with scales and water-saving adaptations be suited for?
 - a. Wetland
 - b. Desert
 - c. Deciduous Forest
 - d. Tropical Rainforest



Use Figure 3 and the definitions found above to answer the questions below.

- _____ What level consumer is the frog?
 a) primary b) secondary c) tertiary d) all of the above
- _____ What is the role of the rabbit?
 a) carnivore b) decomposer c) herbivore d) omnivore
- _____ What is the role of the berries?
 a) carnivore b) decomposer c) herbivore d) producer
- _____ Which organism in the food web is a top level consumer (the highest level consumer)?
 a) bear b) earthworm c) frog d) rabbit
- _____ Why do you think there are arrows from all organisms pointing into the mushroom?
 a) Most organisms like to eat mushrooms. b) Mushrooms are the centerpiece of most food webs.
 c) Mushrooms eat many different organisms d) Mushrooms decompose all organisms when they die.

COMPLETION: Write two complete sentences to answer the following:

- Could a balanced ecosystem contain producers and consumers but no decomposers? Why or why not?
- What are animal adaptations and how do animals get them?
- Why do birds have different shaped beaks?
- Natural selection** is the process by which organisms best suited to the environment survive and reproduce, thereby passing their genes to the next generation. **EXPLAIN HOW THIS WORKS:**

WETLANDS:

Write the name of each type of wetland on the correct line.

18. _____ - areas usually flooded & support a variety of wetland plants and trees.
19. _____ - low, wet land, often treeless & periodically flooded (as in tidal zones).
20. _____ - water-logged ground whose soil is made up mostly of layers of decayed plant matter & whose lack of nutrients leads to many biological adaptations (ex. carnivorous plants).
21. List 3 plants and 3 animals that can be found in a wetland.

PLANTS:

ANIMALS:

Wetlands are important for many reasons. Use each metaphor listed below and explain how it relates to a wetland.

22. Sponge –

23. Pillow –

24. Coffee Filter –

25. Cereal, blueberries –