

AP Biology Ecology Unit Worksheet #1 Answer Sheet

Interactive Question 50.4

- a. Aphotic—6
- b. Abyssal—7
- c. Benthic—8
- d. Intertidal—1
- e. Neritic—2
- f. Oceanic—3
- g. Pelagic—5
- h. Photic—4

Interactive Question 50.5

- a. Desert
- b. Temperate Grassland
- c. Tropical Forest
- d. Temperate Broadleaf Forest
- e. Coniferous Forest
- f. Arctic and Alpine Tundra

Interactive Question 50.6

- a. What are the advantages and disadvantages of being a regulator?
 - An advantage of being a regulator is that their internal processes can help them acclimate to external changes and conditions. Therefore, they can live in different environments. A disadvantage of being a regulator is that they have to use more energy to survive.
- b. How does the principle of allocation relate to a conformer?
 - A conformer is the opposite of a regulator—they do not use internal mechanisms to adjust to external environments. Rather, they just conform to them. The principle of allocation states that if an organism uses energy for one function, such as reproduction, then it limits or reduces the amount of energy available for other bodily processes. This principle relates to a conformer because they do not have to use as much energy as they do not moderate internal change in the face of external fluctuation. This gives them more energy to use for other functions.
- c. What is acclimation?
 - Acclimation is adapting to a change in the environment, or to an altogether new environment. This could be to a new temperature or a different location.

Structure Your Knowledge

1)

a. Define Ecology

→ Ecology is the scientific study of the interactions between organisms and the environment. The environment includes abiotic and biotic factors. The interactions between the organisms and their environment determine their distribution and abundance.

b. What methods are used to answer ecological questions?

→ Three common ecological questions are: Where do they live? Why do they live there? and How many are there? Ecology is a rigorous