

**AP Biology: Ecology Unit Worksheets #1 Answer Sheet**

**Answer Question 26.4**

- a. Arctic...4
- b. Desert...7
- c. Desert...8
- d. Desert...1
- e. Desert...2
- f. Desert...3
- g. Desert...5
- h. Desert...6

**Answer Question 26.5**

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

**Answer Question 26.6**

- a. What are the advantages and disadvantages of being a regulator?
  - a. The advantage of being a regulator is that their internal processes are largely stable regardless of external things 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 alternative states in a regulator?
  - a. An example is the opposite of a regulator - they do not use internal capabilities to adjust to external conditions. Water, they just continue to float. The principle of alternative states that if one regulator 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 tradeoff because they do not have as much energy as they do not produce internal change for the rest of internal functions. Therefore, they save energy to use for other functions.
- c. What is acclimation?
  - a. An organism is adapting to a change in its environment, or even altogether new environment. This could be via one regulator or a different location.

**Answer Question Knowledge**

- 1.
  - a. Define Ecology
    - a. 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?
    - a. There are three ecological questions are: Where do they live? Why do they live there? and How many are there? Ecology is a science.