

1. The sum of all Earth's ecosystems is called the
 - a. stratosphere
 - b. lithosphere
 - c. biosphere
 - d. hydrosphere
 - e. troposphere

2. Which ecological unit includes abiotic factors?
 - a. community
 - b. ecosystem
 - c. population
 - d. species
 - e. organism

3. Important abiotic factors of certain environments include which of the following?
 - I. temperature
 - II. water
 - III. wind
 - a. I only
 - b. II only
 - c. III only
 - d. I and II only
 - e. I, II and III

4. Which of the following levels of organization is arranged in the correct sequence. (starting with the broadest or largest category to the smallest category)
 - a. community, ecosystem, individual, population
 - b. ecosystem, community, population, individual
 - c. population, ecosystem, individual, community
 - d. individual, population, community, ecosystem
 - e. individual, community, population, ecosystem

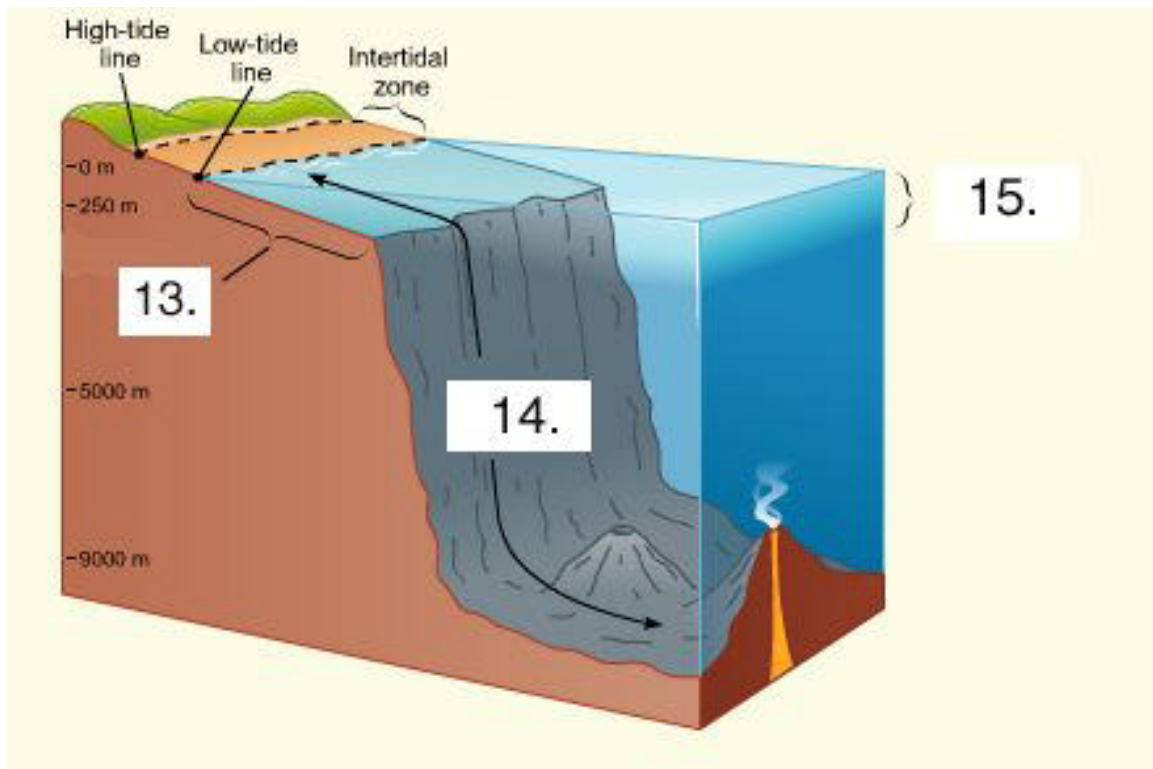
5. Polar regions are cooler than the equator mainly because
- there is more ice at the poles.
 - sunlight strikes the poles at an low angle.
 - the poles are farther from the sun.
 - the poles have a thicker atmosphere.
 - the poles are permanently tilted away from the sun.
6. In terms of global air circulation, the equatorial latitudes are a region where air
- falls and warms, dropping rain
 - falls and warms, creating arid conditions
 - rises and warms, dropping rain
 - rises and cools, creating arid conditions
 - rises and cools, dropping rain
7. Which type of biome would most likely occur in a climate with mild, rainy winters and hot, dry summers?
- desert
 - ~~b.~~ coniferous forest
 - temperate grassland
 - chaparral
 - savanna
8. Which of the following biomes would have the greatest number of different species per square kilometer?
- ~~a.~~ desert
 - coniferous forest
 - tropical forest
 - savanna
 - temperate deciduous forest

9. The factors that help to perpetuate temperate grasslands, such as the American prairies, and prevent them from becoming woodlands include
1. poor soil
 2. seasonal drought and frequent fires
 3. an abundance of large grazing mammals
- a. 1
 - b. 2
 - c. 3
 - d. 1, 2, and 3
 - e. both 2 and 3
10. Phytoplankton is most frequently found in which of the following zones?
- a. intertidal
 - b. photic
 - c. benthic
 - d. aphotic
 - e. deep sea vents
11. Which of the following is the main reason why an estuary like the Chesapeake Bay is more productive than an equal area of open ocean at the same latitude?
- a. The estuary receives more sunlight.
 - b. The estuary is deeper.
 - c. The soil and water of the estuary are richer in nutrients.
 - d. The plants and algae of the estuary have surfaces to cling to and therefore can grow larger.
 - e. The open ocean environment is too varied to support more kinds of life.
12. What is the primary source of energy for hydrothermal vent communities?
- a. the heat of the water emerging the vents.
 - b. energy extracted from petroleum compounds in the vent water.
 - c. energy extracted from sulfur compounds in the vent water.
 - d. sunlight that reaches the ocean floor.
 - e. energy extracted from dead organisms from the ocean above.

Use the following to correctly label the ocean zones in the illustration.

KEY:

- a. trophic zone
- b. benthic zone
- c. continental shelf
- d. photic zone
- e. aphotic



13. _____

14. _____

15. _____