Matching Questions

Match the description of the marine organism's lifestyle with the correct term. Use each choice once, more than once, or not at all.

A) nanoplankton
B) epifauna
C) meroplankton
D) holoplankton
E) infauna
F) nekton
G) picoplankton

1) can never swim against a current
2) floats for a portion of its life
3) lives on top of benthic sediments
4) lives in benthic sediments
5) swims for its entire life

Match the marine zone with its correct location. Use each choice once, more than once, or not at all.

A) pelagic
B) neritic
C) benthic
D) pelagic, neritic

6) abyssal
7) abyssopelagic
8) bathyal
9) epipelagic
10) hadal
11) littoral
12) mesopelagic
13) subtidal
True/False Questions

14) The science of classifying and naming organisms is called taxonomy.

15) Plankton includes all organisms such as bacteria, algae, and animals that actively swim independently of ocean currents.

16) Meroplankton are organisms that spend the larval phase of their life cycle associated with the ocean bottom (benthos) and the adult phase of the life cycle as plankton.

17) Phytoplankton are small in size as a result of predation pressure.

18) Streamlining in fishes and other nektonic organisms means that the minimum amount of energy is expended to swim through the water.

19) A euryhaline organism would be poorly adapted to living in coastal environments.

20) Species diversity and total biomass are greater in warm-water marine environments in comparison to cold-water marine environments.

21) One reason that polar climates support a higher biomass is that colder water can hold more dissolved oxygen than warmer water.

22) The neritic province is associated with the continental shelf.

23) The oxygen minimum layer is found in the bathypelagic zone.

Multiple Choice Questions

24) Which of the following statements concerning bacteria is false?
A) Bacteria can be found living in extreme environments (heat, salinity, cold, etc.).
B) Bacteria have a cell membrane and a cell wall.
C) Bacteria lack membrane-bound organelles and a distinct nucleus surrounded by a nuclear membrane.
D) Bacteria reproduce asexually only.
E) Bacteria were the first type of cells to evolve on earth.

25) Which of the following associations is incorrect?
A) Kingdom Animalia – dolphins
B) Kingdom Fungi – mushrooms
C) Kingdom Monera – bacteria in hydrothermal vents
D) Kingdom Plantae – algae
E) Kingdom Protista – phytoplankton

26) Planktonic organisms that spend part of their life in planktonic form, and the rest of their life as either benthos or nekton are called:
A) bacterioplankton.
B) holoplankton.
C) macroplankton.
D) meroplankton.
E) zooplankton.
27) An example of an organism that might be part of the infauna is a/an:
A) bull kelp.
B) crinoid.
C) lug worm.
D) shark.
E) tuna.

28) Most marine species are found in the:
A) bathypelagic environment.
B) benthic environment.
C) mesopelagic environment.
D) oceanic environment.
E) pelagic environment.

29) A small size is advantageous for marine organisms because it:
A) increases the ability to absorb nutrients.
B) increases the ability of wastes to diffuse out of the organism.
C) increases the surface area to volume ratio that in turn reduces frictional resistance to sinking.
D) All of the above statements are advantageous to marine organisms.
E) None of the above statements are advantageous to marine organisms.

30) When compared to their warmer water counterparts, cold-water plankton often:
A) are larger in size.
B) are smaller in size.
C) exhibit countershading.
D) have more spines and ornamentation on the cell wall.
E) reproduce asexually only.

31) A common body shape that streamlines an organism in the marine environment is a flattened body that:
A) has a wide, blunt front end.
B) tapers at the front end.
C) tapers at the top surface.
D) tapers at the back end.
E) tapers at the bottom surface.

32) An organism that tolerates a wide range of salinities is referred to as:
A) euryhaline.
B) hypertonic.
C) hypotonic.
D) isotonic.
E) stenohaline.

33) Osmotic pressure increases as the:
A) difference in salinity decreases.
B) difference in salinity increases.
C) difference in temperature increases.
D) salinity increases.
E) temperature increases.
34) Compared to freshwater fishes, marine fishes:
A) drink seawater and produce a large volume of urine.
B) do not drink seawater in an effort to conserve as much water as possible.
C) produce a large volume of dilute urine in an effort to rid their bodies of excess water.
D) tend to gain water by osmosis since their internal salt concentration is higher than that of seawater.
E) tend to lose water by osmosis since their internal salt concentration is lower than that of seawater.

35) The seasonal temperature range in the deep ocean is usually:
A) between -2° and 32°C.
B) between 0° and 15°C.
C) between 2° and 8°C.
D) between 8° and 25°C.
E) negligible.

36) The euphotic zone is confined to the:
A) abyssopelagic zone.
B) bathypelagic zone.
C) epipelagic zone.
D) mesopelagic zone.
E) neritic province.

37) Organisms with small bodies, extremely large mouths, and sharp teeth are likely to be found in the:
A) bathypelagic zone.
B) epipelagic zone.
C) intertidal zone.
D) neritic province.
E) photic zone.

Word Relationships

Examine the five words and/or phrases and determine the relationship among the majority of words/phrases. Choose the one option that does not fit the pattern.

38) 
A. Animalia
B. Archaea
C. Fungi
D. Plantae
E. Protoctista

39) 
A. seagrasses
B. krill
C. jellyfish
D. floating Sargassum
E. zooplankton
40)  
A. abyssopelagic  
B. bathypelagic  
C. benthopelagic  
D. epipelagic  
E. mesopelagic