

Name: _____ Class: _____ Date: _____

Marine Biology Chapter 11 Questions

True and False

Determine if the statements below are True or False. If False, please correct the statement.

1. The largest high-to-low range of the tide would occur during a *spring* tide.
2. Some snails use a light-colored operculum to reflect sunlight in hot intertidal habitats.
3. Deposit feeders are very common in rocky intertidal areas due to the high amount of detritus trapped in the rocks.
4. Intertidal algae tend to be rigid in order to withstand wave shock.
5. Rocky headlands tend to refract waves such that they bend toward the headland itself.
6. Intertidal barnacles anchor themselves to the rock using a foot-like tissue with powerful suction.
7. Most rocky intertidal species disperse via larvae.
8. Nutrients from seawater are generally the key limiting resource in the rocky intertidal zone.
9. Few marine predators can reach the upper intertidal zone, so limpets and snails are relatively free from predation.
10. Caging experiments have shown that mussels are superior to algae as competitors for space, and algae may only "win" the competition if there is high predation of the mussels.

11. Periwinkles (*Littorina*) often dominate the upper rocky intertidal because they can breathe air and tolerate extreme temperatures.
12. Little gray barnacles tend to grow in a band above rock barnacles in the rocky intertidal because their larvae settle above those of the latter.
13. Rockweeds such as *Fucus* form dark green mats or tar-like blotches in the upper intertidal.
14. In the middle rocky intertidal, disturbances such as wave action always reduce the diversity by removing species.
15. If limpets graze on newly settled larvae and spores, succession may never pass the bacteria and algal film stage.
16. The lower rocky intertidal zone is dominated by lichens and cyanobacteria.
17. Large animals of soft-bottom communities are dominated by *epifauna*.
18. Seaweeds grow well in some soft-bottom communities because their holdfasts grip the sediment well.
19. Calm, sheltered areas tend to have muddy bottoms, while sedimented areas with higher currents and waves tend to be more sandy.
20. The presence of hydrogen sulfide in marine sediments indicates the presence of anaerobic bacteria and low oxygen.
21. Burrowing clams use their feet to rock their shells back and forth to dig a hole.

22. The term *meiofauna* refers to microscopic animals that live in interstitial spaces.
23. Many marine animals in soft-bottom communities specialize as herbivores on the abundant mats of diatoms that often grow there.
24. Upper zones of sandy beaches are dominated by crustaceans that eat smaller animals, detritus, and other dead matter.