

**Quiz #4 - Oceans and Currents****Multiple Choice**

*Identify the choice that best completes the statement or answers the question.*

- \_\_\_ 1. By studying variations in color in the ocean, scientists can determine the presence of  
a. oxygen. c. phytoplankton.  
b. trace elements. d. sea mammals.
- \_\_\_ 2. The deepest place in Earth's crust is a(n)  
a. trench. c. submarine canyon.  
b. abyssal plain. d. seamount.
- \_\_\_ 3. The two principal gases dissolved in ocean water are  
a. nitrogen and oxygen. c. oxygen and hydrogen.  
b. hydrogen and nitrogen. d. carbon dioxide and oxygen.
- \_\_\_ 4. A gap in a line of breakers is often a sign of  
a. rip currents. c. deep currents.  
b. undertow. d. longshore currents.
- \_\_\_ 5. The Marianas Trench is associated with which volcanic island chain and where is it located?  
a. The Marianas Islands and about half way between Japan and Indonesia.  
b. The Aleutian Islands and about half way between Alaska and the Province of Vancouver.  
c. Catalina Islands, just off the coast of California.  
d. The Philippians Islands and about half way between the Japan and Indonesia.
- \_\_\_ 6. Scientists use sonar to  
a. obtain samples from the ocean floor.  
b. measure the temperature of ocean water.  
c. calculate the depth of the ocean floor.  
d. photograph ocean organisms.
- \_\_\_ 7. As deep ocean water becomes colder, it also becomes  
a. denser. c. saltier.  
b. clearer. d. lighter.
- \_\_\_ 8. What is called the foundation of life in the ocean?  
a. minerals c. whales  
b. plankton d. salt
- \_\_\_ 9. Two consecutive wave crests pass a given point in one  
a. trough. c. swell.  
b. wave period. d. wavelength.
- \_\_\_ 10. What is the name for the movement of deep, cold an nutrient-rich water to the surface?  
a. desalination c. upwelling  
b. thermocline d. benthos
- \_\_\_ 11. Which of the following causes gyres to form?  
a. the Equatorial Countercurrent c. the Coriolis effect  
b. West Wind Drift d. deep currents

- \_\_\_ 12. Seamounts are most likely to form in  
a. tablemounts. c. hot spots.  
b. trenches. d. fracture zones.
- \_\_\_ 13. A large body of saline water that may be surrounded by land is a(n)  
a. sea. c. ocean.  
b. global ocean d. submersible.
- \_\_\_ 14. Meteorite dust is one kind of  
a. core sample. c. inorganic sediment.  
b. nodule. d. ooze.
- \_\_\_ 15. Calling a tsunami a tidal wave is misleading because  
a. a tsunami does not occur in the ocean.  
b. a tsunami is not caused by tides.  
c. a tsunami is not really a wave.  
d. a tsunami only occurs during ebb tides.
- \_\_\_ 16. The deepest and largest ocean on Earth is the  
a. Indian. c. Pacific.  
b. Atlantic. d. Southern.
- \_\_\_ 17. The factors that determine the size of a wave are wind speed, fetch, and  
a. the length of time the wind blows.  
b. water salinity.  
c. water temperature.  
d. amount of sediment on the ocean floor.
- \_\_\_ 18. Most mid-ocean ridges form  
a. along fracture zones. c. below sea level.  
b. in trenches. d. in areas of increased volcanic activity.
- \_\_\_ 19. Nutrients in ocean water are stored  
a. at the tropics. c. near the surface.  
b. at the polar regions. d. in deep water.
- \_\_\_ 20. If high tide is at 4:00 p.m. today, at about what time will high tide occur tomorrow?  
a. 4:50 p.m. c. 3:10 p.m.  
b. 4:25 p.m. d. 4:00 a.m.