

## Unit 5 Oceanography

### Multiple Choice

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

- \_\_\_\_\_ 1. Approximately how much of Earth's surface is covered by water?  
a. 50 percent  
b. 30 percent  
c. 70 percent  
d. 40 percent
- \_\_\_\_\_ 2. The largest of Earth's oceans is the \_\_\_\_\_.  
a. Atlantic  
b. Arctic  
c. Pacific  
d. Indian
- \_\_\_\_\_ 3. Which of the following is NOT considered one of the four major oceans?  
a. Indian  
b. Pacific  
c. Atlantic  
d. Antarctic
- \_\_\_\_\_ 4. Isolated volcanic peaks on the ocean floor are called \_\_\_\_\_.  
a. plateaus  
b. ridges  
c. seamounts  
d. nodules
- \_\_\_\_\_ 5. What technology do scientists use to measure ocean depth?  
a. laser  
b. rope  
c. sonar  
d. submersible
- \_\_\_\_\_ 6. Which of the following can submersibles do?  
a. collect data about areas of the ocean that were previously unreachable by humans  
b. map the ocean surface from space  
c. remain underwater for long periods of time  
d. both a and c
- \_\_\_\_\_ 7. Which of the following is NOT one of the three major regions of the ocean floor?  
a. coastal plain  
b. ocean basin floor  
c. continental margins  
d. mid-ocean ridges
- \_\_\_\_\_ 8. Mineral-rich water, heated by newly formed oceanic crust, escapes through cracks in the ocean floor called \_\_\_\_\_.  
a. nodules  
b. rifts  
c. hydrothermal vents  
d. trenches
- \_\_\_\_\_ 9. Where does seafloor spreading occur?  
a. at divergent plates  
b. on seamounts  
c. near the ocean surface  
d. at convergent plates
- \_\_\_\_\_ 10. Ocean salinity is usually expressed in \_\_\_\_\_.  
a. parts per billion  
b. charts  
c. parts per thousand  
d. chemical formulas
- \_\_\_\_\_ 11. Which of the following is NOT a process that decreases the salinity of seawater?  
a. evaporation  
b. icebergs melting  
c. precipitation  
d. runoff from land
- \_\_\_\_\_ 12. The ocean layer of rapid temperature change with depth is known as the \_\_\_\_\_.  
a. trophic level  
b. mixed zone  
c. deep zone  
d. thermocline

- \_\_\_\_ 13. What is density?
- a. weight-per-unit mass
  - b. weight-per-unit volume
  - c. mass-per-unit volume
  - d. mass-per-unit area
- \_\_\_\_ 14. In addition to salinity, what factor affects the density of seawater?
- a. depth
  - b. latitude
  - c. temperature
  - d. salt content
- \_\_\_\_ 15. The energy that drives surface ocean currents comes from \_\_\_\_.
- a. temperature differences
  - b. wave action
  - c. wind
  - d. salinity variations
- \_\_\_\_ 16. What causes surface ocean currents to be deflected?
- a. deep currents
  - b. Earth's revolution
  - c. global winds
  - d. the Coriolis effect
- \_\_\_\_ 17. The rising of cold water from deeper layers to replace warmer surface water is called \_\_\_\_.
- a. a surface current
  - b. the Coriolis effect
  - c. upwelling
  - d. reflection
- \_\_\_\_ 18. The horizontal distance between two successive crests is called the \_\_\_\_.
- a. fetch
  - b. wave period
  - c. wavelength
  - d. wave height
- \_\_\_\_ 19. Which of the following is visible evidence of energy passing through water?
- a. sea arch
  - b. wave
  - c. density tide
  - d. Coriolis effect
- \_\_\_\_ 20. The height, length, and period of a wave does NOT depend upon which of the following?
- a. wind speed
  - b. fetch
  - c. tidal range
  - d. the length of time the wind has blown

**Completion**

Complete each statement.

21. The ocean floor contains mountain ranges, trenches, and flat regions called \_\_\_\_\_.
22. New \_\_\_\_\_ is formed at mid-ocean ridges as magma rises between diverging plates and cools.
23. A thermocline is not present in high latitudes; instead, the water column is \_\_\_\_\_.
24. The ocean's surface water temperature varies with the amount of solar radiation received, which is primarily a function of \_\_\_\_\_.
25. Most ocean waves obtain their energy and motion from the \_\_\_\_\_.
26. \_\_\_\_\_ is the time it takes one wavelength to pass a fixed position.

**Short Answer**

27. Describe temperature and light conditions on the deep-ocean floor.
28. What causes a density current?