Currents EDGENUITY Quiz

1. Which of these events happens first in Earth's polar regions?
   a. The dense water sinks.
   b. The water travels as a deep current.
   c. Water molecules move closer together.
   d. Cold air chills water molecules.

2. What are the two causes of density in deep current waters?
   a. Salinity (how much salt) of the water and high temperatures.
   b. Salinity (how much salt) of the water and low temperatures.
   c. Oxygen content of the water and high temperatures.
   d. Oxygen content of the water and low temperatures.

3. What is the pycnocline?
   a. The boundary between the surface water and deep water.
   b. The changing level of ocean salinity.
   c. The places where two surface currents meet.
   d. The boundary north of which water moves clockwise and south of which water moves counterclockwise.

4. In 1947 Thor Heyerdahl sailed a simple raft from Peru to Polynesia, following the ocean currents for more than 6,000 kilometers. Which statement accurately describes what Heyerdahl proved by this voyage?
   a. Ancient Peru was settled by people from Polynesia.
   b. People from ancient Peru were the first settlers of Polynesia.
   c. It would have been possible for people from ancient Peru to reach Polynesia by following ocean currents.
   d. Polynesia was settled accidentally when rafts from Peru were carried out by ocean currents.

5. The Gulf Stream is an example of a(n) _____ current.
   a. Surface
   b. Coriolis effect
   c. deep
   d. Antarctic

6. What force makes cold water sink toward the ocean floor?
   a. Global winds
   b. The sun
   c. gravity
   d. the Coriolis effect

7. How does the Coriolis effect make ocean currents appear to move?
   a. Back and forth
   b. In a curved path
   c. clockwise
   d. against the Earth's rotation

8. What term describes the movement of ocean water between surface and deep water?
   a. Pycnoclining
   b. Conveyor belt cycling
   c. The Coriolis effect
   d. none of the above

9. A stream-like movement of ocean water far below the ocean surface is a
   a. Gravitational current
   b. Coriolis current
   c. surface current
   d. deep current

10. What happens to an ocean current when it hits a continent?
    a. It changes direction.
    b. It moves toward the poles.
    c. It moves toward the Equator
    d. It speeds up.

11. How much of the oceans' water is part of the deep waters?
    a. 50% c. 99%
    b. 25% d. 90%

12. The density of ocean water increases when it
    a. Joins the Gulf Stream c. gets warmer
    b. Gets colder d. turns to ice

13. Which currents carry warm water away from the equator?
    a. Deep currents c. surface currents
    b. Evaporation d. freezing

14. The curved paths of global winds and surface currents are caused by
    a. The revolution of the Earth c. warm air near the Equator
    b. The Coriolis effect d. continental deflection

15. Temperature, salinity, and density are factors in the formation of
    a. Wind currents c. electric currents
    b. Deep currents d. surface currents.

16. The Gulf Stream Current is deflected by North America, causing the current to change direction. What is this concept called?
    a. Continental deflection c. Pycnocline
    b. The Coriolis effect d. Conveyor belt cycling

17. Surface currents are caused by
    a. Floods c. the wind
    b. Warm water d. the equator

18. Ocean currents flow from east to west near the
    a. Gulf Stream c. equator
    b. Poles d. global winds

19. In what direction do global winds and currents flow near the equator?
    a. East to west c. toward the land
    b. West to east d. north to south

20. Compared with surface currents, deep currents are
    a. Colder and less dense c. warmer and denser
    b. Warmer and less dense d. colder and denser

21. What three factors control surface currents?
    1-
    2-
    3-

22. What are three factors that control deep currents?
    1-
    2-
    3-