Released SOL Test Questions – answer key
Sorted by Topic
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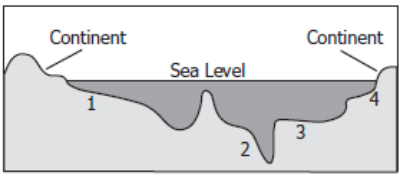
SOL 4.7 The Ocean Environment

Key concepts include

a. **geology of the ocean floor;**
b. **physical properties and movement of ocean water; and**
c. **interaction of organisms in the ocean.**

OCEAN FLOOR

1. The ocean floor —
   a. is always a flat bed of sand
   b. has mountains, plains, and ridges like land surfaces
   c. is covered by the same amount of water everywhere
   d. covers less area than the land



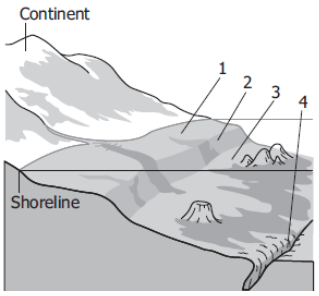
2. Which location is likely to have the greatest water pressure, the coldest temperatures, and the smallest number of living organisms?
   a. 1
   b. 2
   c. 3
   d. 4

3. Which best describes the part of the ocean called the continental shelf?
   a. A flat underwater valley
   b. A region of mountains in the deep ocean
   c. A shallow area of sediment near the shore
   d. A region with a higher water pressure

4. Which of these are the deepest parts of the ocean?
   a. Continental shelves
   b. Continental slopes
   c. Ocean trenches
   d. Abyssal plains

5. Lobster pots are used by fishermen to catch lobsters in shallow water. In which area of the ocean would commercial fishermen most likely place their lobster pots?
   a. On the bottom of an ocean trench
   b. On top of a mid-ocean ridge
   c. On the continental slope
   d. On the continental shelf

6. The diagram shows a model of the ocean floor. Which number identifies the ***continental slope***?)
   a. 1
   b. 2
   c. 3
   d. 4



7. At which location are oceans the deepest?
   a. Mid-ocean ridge
   b. Abyssal plain
   c. Ocean trench
   d. Volcanic island

OCEAN WATER

8. The main difference between ocean water and lake water is that ocean water contains —
   a. oxygen
   b. salt
   c. algae
   d. plants

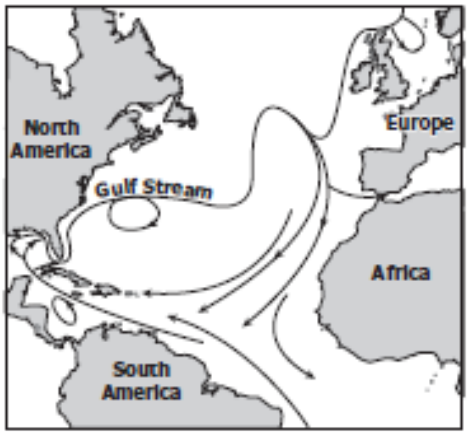
9. Which of these increases as a submarine dives deeper into the ocean?
   a. The number of plants in the water
   b. The freshness of the water
   c. The water temperature
   d. The water pressure

10. The salinity of the Mediterranean Sea is greater than that of the Atlantic Ocean. This means that, compared to the Atlantic Ocean, the Mediterranean Sea is —
    a. wider
    b. deeper
    c. saltier
    d. cooler

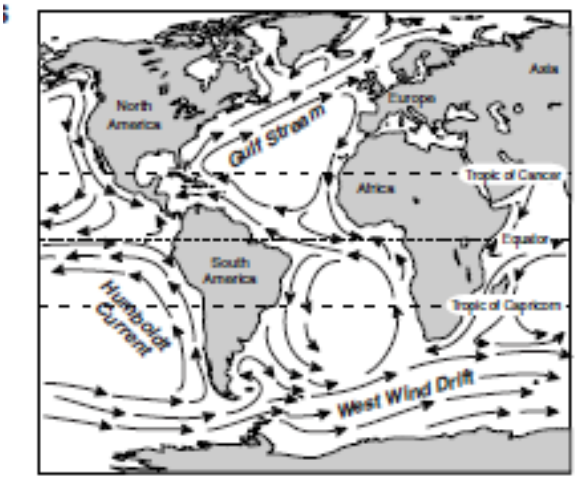
11. The most important reason that lakes and oceans have different types of animal life is that oceans have —
    a. sandy shores and bottoms
    b. water with more salt
    c. large waves at the edges
    d. a much larger surface area

12. Submarines have explored many parts of the ocean. As submarines descend, scientists observe that there is an increase in the —
    a. amount of light
    b. water temperature
    c. water pressure
    d. types of ocean organisms

OCEAN MOTION

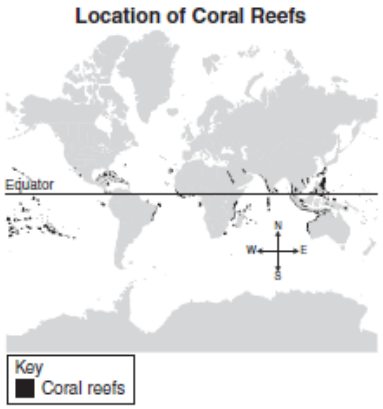


13. What do the arrows on the map represent?
    a. Size of waves
    b. Water density
    c. Ocean currents
    d. Time between tides



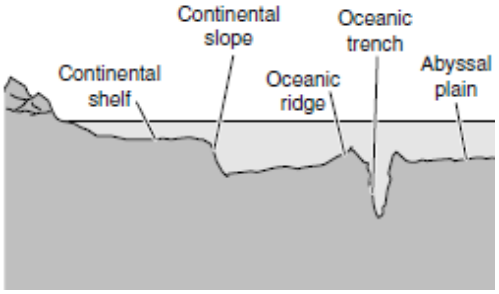
14. Sailors long ago would catch the current off the coast of Virginia. This current would help them get to —
    a. South America
    b. Central America
    c. Europe
    d. Southern Africa

OCEAN LIFE



15. Many species of ocean organisms live in coral reefs. The map shows that most coral reefs are found near the equator. What does the location of coral reefs suggest about coral organisms?
    a. Corals need warm seawater to survive.
    b. Corals mostly live around volcanic islands.
    c. Ocean currents keep corals from migrating.
    d. Most ocean waters are too deep for corals.

16. Algae in the ocean provide much of Earth's —
    a. oxygen
    b. hydrogen
    c. nitrogen
    d. carbon dioxide



17. Algae and other producers need lots of sunlight. Most ocean algae would be found in the water —
    a. on the abyssal plain
    b. in the oceanic trench
    c. above the continental shelf
    d. beside the continental slope