

Directed Reading B (Lesson 14-1)

Section: Currents

Read the words in the box. Read the sentences. **Fill in each blank** with the word or phrase that best completes the sentence.

continents

water

weather

- Ocean currents are streamlike movements of ocean _____.
- Storms and other kinds of _____ can change ocean currents.
- Ocean currents also change because of the Earth's rotation and where the _____ are located.

ONE WAY TO EXPLORE CURRENTS

Circle the letter of the best answer for each question.

- How did Thor Heyerdahl's raft travel from Peru to Polynesia?
 - with a motor
 - on a truck
 - in an airplane
 - on ocean currents

SURFACE CURRENTS

- Which of the following does NOT control surface currents?
 - ocean traffic
 - continental deflections
 - global winds
 - the Coriolis effect

Directed Reading B *continued*

Global Winds

Circle the letter of the best answer for each question.

6. In what direction do winds near the equator blow ocean water?
- a. west to east
 - b. east to west
 - c. toward the land
 - d. toward the open sea

The Coriolis Effect

7. Because of the Coriolis effect, how do currents appear to move?
- a. in curved paths
 - b. in straight paths
 - c. toward the land
 - d. toward the open sea

Continental Deflections

8. What happens to an ocean current when it gets deflected?
- a. It gets cold.
 - b. It sinks.
 - c. It moves faster.
 - d. It changes direction.

Taking Temperatures

9. Where do cold-water currents begin?
- a. near the equator
 - b. near the poles
 - c. in deep water
 - d. in shallow water

Directed Reading B *continued*

DEEP CURRENTS

Read the description. Then **draw a line** from the dot next to each description to the matching word.

- | | | |
|-----------------------------------------------------------------|---|-----------------|
| 10. a streamlike movement of water that forms deep in the ocean | ● | a. deep current |
| 11. the amount of matter in a given space | ● | b. density |
| 12. the amount of dissolved salts or solids in a liquid | ● | c. salinity |

Formation and Movement of Deep Currents

Circle the letter of the best answer for each question.

13. What describes ocean water when ice forms at the surface?
- a. It gets less dense.
 - b. It begins to move.
 - c. It gets denser.
 - d. It cracks the ice.
14. How does evaporation change the ocean water that is left behind?
- a. The water gets less dense.
 - b. The water moves up.
 - c. The water gets denser.
 - d. The water gets fresher.
15. How do deep ocean currents compare to surface ocean currents?
- a. Deep currents flow faster.
 - b. Deep currents are denser.
 - c. Winds directly control deep currents.
 - d. Deep currents are less dense.