

Unit 10 Section 1 Study Guide

Directions: Answer the following questions.

Reviewing Objectives Part 1:

1. Describe the major causes for the ocean's surface and deep water currents, including the prevailing winds, the Coriolis effect, unequal heating of the Earth, changes in water temperature and salinity in high latitudes, and basin shape. Pages: 519-24, 561, 668
2. Identify factors affecting seawater density and salinity and describe how density affects oceanic layering and currents. Pages: 499, 514-15
3. Explain how the Coriolis effect controls oceanic circulation. Pages: 520, 524, 561,668

Reviewing Major Concepts Part 2: *Chapter 21 section 1*

1. Describe the force that drives most surface currents.
2. Identify the winds that affect the surface currents on either side of the equator.
3. Identify the winds that affect the surface currents in the middle latitudes.
4. Describe how density affects the flow of deep currents.
5. List the factors that affect the density of ocean water.
6. List three major surface currents and two major deep currents.

CRITICAL THINKING

7. Predicting Consequences Describe how surface currents would be affected if Earth did not rotate.
8. Identifying Relationships Explain how the distribution of solar energy around Earth affects ocean surface currents.