

Review Questions  
Chapters 7 & 8  
Introduction to Biodiversity  
APES

**Chapter 7**

1. Briefly summarize the component parts (e.g., heat from the tropics, dense salt water, melting ice, etc.) of the ocean currents as they travel from the North Atlantic to the Pacific and back.
2. What would be the result if the ocean's currents did not function?
3. Briefly summarize the El Niño Southern Oscillation.
4. Using the environmental factors of moisture and temperature, describe the relationship between the three types of biomes (e.g., grasslands or forests).
5. The author of the book indicates that attempting to strike a balance between exploitation of terrestrial natural capital and conservation of that capital is controversial. What might you say to a person whose livelihood comes from the timber industry (or mining, or agriculture making heavy use of irrigation) to encourage consideration of the ongoing degradation of the natural capital and its eventual impact on him/her?

**Chapter 8**

1. Briefly explain the major types of organisms in aquatic life zones, giving an example of each.
2. Briefly explain why estuaries and coastal wetlands exhibit high productivity.
3. Compare and contrast estuaries and intertidal pools in terms of biodiversity.
4. Explain how the open sea can be both an area of low average primary productivity and the largest contributor to the earth's overall net primary productivity.
5. Examine figure 8-17 on page 176 of the text. Consider why global warming is likely to cause a lessening of the amount of available freshwater and how that would likely cause changes throughout the downhill flow of freshwater.