

Review Questions - Chapter 8

Answer the following questions using your OWN WORDS!!!! DO NOT copy right out of the book!!! Please attach this handout with your answers. All answers should be hand-written!!

1. What are coral reefs and coral polyps? How are coral reefs formed? List seven ecological and economic services that coral reefs provide. What is coral bleaching, and what are its main causes?
2. What are the two major types of aquatic life zones?
3. Distinguish among phytoplankton, zooplankton, ultraplankton, nekton, benthos, and decomposers found in saltwater and freshwater life zones.
4. Describe major advantages and disadvantages of living in an aquatic environment.
5. List four major factors determining the types and numbers of organisms found in the surface, middle, and bottom layers of aquatic systems. How do the concentrations of carbon dioxide and dissolved oxygen vary in these three layers??
6. What major ecological and economic services are provided by the world's marine systems?
7. What is the coastal zone? Distinguish among estuaries, coastal wetlands, and mangroves. List three reasons why temperature and salinity vary widely in estuaries and coastal wetlands, and explain why they have such a high NPP.
8. What is the intertidal zone? Distinguish between rocky shores and sandy beaches, and describe the major types of aquatic life found in each.
9. What are barrier islands? Why are they so attractive for human development, and why are human structures built there so vulnerable to destruction? Why is it important to preserve the dunes on barrier islands and beaches?
10. List three reasons why coral reefs are vulnerable to damage. List ten harmful impacts of human activities on coral reefs.
11. What is the open sea, and what are its three major vertical zones? Why is the NPP per unit of area so low in the open sea?
12. What is a freshwater life zone, and what are the two major types of such zones?
13. What major ecological and economic services are provided by freshwater systems?
14. What is a lake? Distinguish among the littoral, limnetic, profundal, and benthic zones of a lake.
15. What are the three types of lakes, based on their nutrient content and primary productivity?