

Marine Biology Chapter 11: Study Guide

Estuaries

- Vocabulary

Estuaries

- Know the characteristics of an estuary
- Know what human interactions on estuaries have resulted in

Origins and Types of Estuaries

- Vocabulary

Drowned river valley	Sand bars	Fjords
Coastal plain estuaries	Barrier islands	
Bar-built estuary	Tectonic estuaries	

- Know some of the other names for an estuary
- Know the four types of estuaries and how they were formed
- Know what types of estuaries form depending on what type of margin is present

Physical Characteristics of Estuaries

- Vocabulary

Salinity	Coriolis effect	Anoxic
Salt wedge	Negative estuaries	Hydrogen sulfide
Tidal currents	Substrate	Anaerobic bacteria
Tidal bore	Interstitial water	

- Know the physical characteristics of an estuary, how they are caused and what they influence
- Be able to determine salinity levels, density levels and tide levels based on geographical location and salt wedge location
- Know what the distribution of salt depends upon
- Know how the type of substrate affects the organisms that live in the estuary
- Know what a sill is and what it does
- Know what water temperature and clarity are like in an estuary

Estuaries as Ecosystems

- Vocabulary

Euryhaline	Anadromous	Mangroves
Stenohaline	Catadromous	Mangals
Brackish-water	Mud flats	Seagrasses
Osmosis	Sulfur bacteria	Outwelling
Osmoconformers	Salt, tidal marshes	Succulents
Osmoregulators	Wetlands	
Primary production	Nitrogen fixers	

- Know what estuary organisms need to deal with in order to live in that habitat
- Know how organisms deal with changing salinity levels including changes in behavior and biological mechanisms

- Be able to determine the direction of osmosis and how osmoregulators and osmoconformers would deal with each scenario
- Know the disadvantages of living in the mud and how organisms deal with those disadvantages
- Know the types of estuaries, conditions in each and what organisms live in them
- Know the three reasons why commercially important fish may use an open water estuary
- Know the different methods used by birds in the mud flats to catch prey
- Know what seagrass beds and oyster reefs are, conditions in each and what organisms live in them
- Know the blue box *Fiddler on the Mud* on page 249
- Know why an estuary have a high primary production
- Be able to understand the generalized food web on page 255