Marine Biology Chapter 12: Study Guide

Continental Shelf and Physical Characteristics

Vocabulary

Continental shelf Tidal currents lithogenous

Sublittoral zone Turbulence
Subtidal zone Sedimentation

- Be able to describe the location of the continental shelf and some general characteristics
- Know the four fundamental characteristics that affect organisms living on the continental shelf
- Know how water motion including tides and waves affect organisms
- Know the three zones of the water column and what happens to certain physical characteristics as depth increases
- Know how salinity varies on the continental shelf
- Know what sedimentation is and how wave motion affects how sediment settles out
- Know how sediment and phytoplankton affect the water
- Know the blue box *Under the Antarctic Ice* on page 259

Continental Shelf as an Ecosystem

Vocabulary

Epifauna Manatee grass Pneumatocyst Infauna Eel grass Kelp beds Sessile **Epiphytes** Kelp forests Patchy Coralline algae Sporophyte Gametophyte Lottery Hypothesis Holdfasts Perennial Detritus Canopy Meiofauna Stipe Understory

Turtle grass Fronds

- Know what influencing inhabiting organisms and how it affects their distribution
- Know the two main types of communities
- Know the general characteristics of a soft bottomed community
- Know the differences and similarities between soft bottoms in the intertidal and on the continental shelf
- Know the characteristics of unvegetated soft bottomed communities
- Know the types of organisms found in an unvegetated soft bottomed communities, their purpose and where they can be found (if applicable)
- Know the characteristics of seagrass beds
- Know the three types of seagrass and their importance and advantages
- Know the importance of their root system
- Know why primary production in a seagrass bed is so high
- Know what types of organisms can be found in a seagrass bed
- Know the general characteristics of a hard bottomed community
- Know the differences and similarities between rocky bottoms in the intertidal and on the continental shelf
- Know the types of organisms (including seaweeds) that are found on rocky bottoms

- Know some of the factors that affect organisms living on a rocky bottom
- Know some of the methods seaweeds employ to escape predation
- Know what predation has on the inhabitants of a rocky shore
- Know what kelps are and some characteristics of kelp communities
- Know the basic structure of a kelp
- Know the four physical factors that play an important role in kelp communities
- Know the basic life cycle of a kelp
- Be able to describe the 3D zonation of a kelp community, the characteristics of each zone and the organisms that inhabit them
- Know the locations where organisms live in and around kelp and examples of each
- Know how grazers affect kelp communities
- Know the reasons why sea urchins populations "explode"
- Know what is being done to protect kelp forests
- Know the blue box *Life in the Mud* on page 262