This study guide should serve to alert you to the important topics covered from this Chapter that will likely appear on exams.

**Chapter 14, Benthic Communities:**

Make sure you understand the relationship between benthic biomass distribution and marine surface productivity.

Know the basics of benthic organisms: relative abundances, phyla, habitats.

Make sure you understand why benthic communities are good indicators of environmental health or stress.

Review the zonations of benthic organisms on both rocky and sandy/muddy shores.

Make sure you understand the different feeding styles of benthic organisms.

Review the distribution and varying diversity of coral reefs globally, and be able to compare them to terrestrial ecosystems.

Review the basics of coral polyp anatomy, and make sure you understand the symbiotic relationship between the polyp and the photosynthetic dinoflagellate found in the polyp zooxanthellae.

Review the basic marine biology of coral reefs - both types of organisms and their habitats in the reef system.

Make sure you understand the different types of reefs and how they form or develop.

Review the current hypotheses invoked to explain coral bleaching, and make sure you understand the variety of threats that are currently causing coral reefs to die, both in Florida, the Caribbean, and globally.

Review the basic biology of life in the deep oceans. Make sure you understand the basis of the food web in the deep oceans, and it depends on nutrients from shallow waters in some instances, and on chemosythesizers in others.