

Life Science 7

Chapter 20-2 (Marine Ecosystems)

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Objectives

- Distinguish between the different areas of the ocean
- Explain the importance of plankton in marine ecosystems
- Describe coral reefs and intertidal areas.

Aquatic Biomes

- three categories of aquatic life
 - **plankton**- _____
 - _____ - photosynthetic plankton, form the base of the food chain
 - _____ - very small phytoplankton
 - _____ - heterotrophic plankton
 - **nekton**- larger, strong swimming organisms
 - **benthos**- bottom dwelling organisms
- subdivided into: **estuary, intertidal, neritic, oceanic, benthic** communities

Estuaries

- **estuary**- _____ (river delta, etc)
 - temperature, salinity, nutrients, fluctuate greatly, requiring a wide tolerance for organisms to live there
 - some of the most nutrient rich water is here, but is in danger from pollution, development, etc

Intertidal Zone

- **intertidal zone**- _____
 - very nutrient rich region, but very stressful, as tide moves in and out
 - organisms need to adapt for _____, and avoiding _____

Neritic Zone

- **neritic zone**: _____
 - sheltered from wave action, but is still shallow enough for photosynthesis
 - variety of echinoderms, fish, worms
 - _____ usually in this zone

Oceanic Zones

- **oceanic zone**: _____
 - lots of photosynthesis from submerged vegetation, phytoplankton
 - good fishing!

Benthic Zone

- **benthic zone-** _____
 - too deep for light, no photosynthesis
 - organisms that live here feed on _____

- **thermal vents-** areas where hot mineral rich water flows up from under the Earth
 - chemosynthetic bacteria use the thermal vents for food, provide a base for food chain in this deep water