

§Marine Ecosystems

§Subdivided into life zones

§Intertidal zone

§Benthic zone

§Pelagic environment

§Neritic Province

§Oceanic Province

§Marine Ecosystems

§Intertidal Zone

§Area of shoreline between low and high tides

§Benthic Zone

§Ocean floor, extending from tidal zone to deep sea trenches

§Sediment is mostly mud

§Burrowing worms and clams

§Three zone

§Bathyal: 200m–4000m deep

§Abyssal: 4000m–6000m deep

§Hadal: 6000m–bottom of deep sea trenches

§Productive Benthic Communities

§Seagrass Beds

§Present to depth of 10 m

§Provide food and habitat to ecosystem

§Kelp Forest

§60 m long brown algae found off rocky shores

§Large Biodiversity

§Coral Reefs

§Built from accumulated layers of CaCO_3

§Colonies of millions of tiny coral animals

§Found in shallow warm water

§Most diverse of all marine environments

§Coral Reef Environments

§Three types of coral reefs

§Fringing reef - directly attach to continent - no lagoon

§Atoll - circular reef in a lagoon

§Barrier reef - separates lagoon from ocean

§Pelagic Environment

§All the open ocean water

§Two main divisions

§Neritic Province

§Water that overlies the continental shelf (to depth of 200 m)

§Organisms are all floaters or swimmers

§Oceanic Province

§Water that overlies depths greater than 200 m

§Organisms are filter feeders, scavengers and predators