

OCN201: Science of the Sea  
Fall 2008  
Benthic Lecture Handout

- (1) Coral reefs contain \_\_\_\_\_ of all marine life (i.e. diversity).
- (2) Reefs are created by \_\_\_\_\_, a tiny animal similar to sea anemones.
- (3) Coral are symbiotic organisms, a combination of \_\_\_\_\_ and \_\_\_\_\_.
- (4) \_\_\_\_\_ are the only flowering plants found in the sea.
- (5) These plants have extensive underground roots called \_\_\_\_\_.
- (6) Two animals that eat sea grasses are \_\_\_\_\_ and \_\_\_\_\_.
- (7) \_\_\_\_\_ is a physical process that helps kelp forests thrive.
- (8) Kelp, which is a type of algae, is up to \_\_\_\_\_ tall and can grow up to \_\_\_\_\_ m/d
- (9) A major predator of kelp is the \_\_\_\_\_
- (10) The sunflower star fish (and most invertebrates) use this sense to sense its prey \_\_\_\_\_.
- (11) The star fish, brittle star, sea urchins and sand dollars are all examples of \_\_\_\_\_.
- (12) Photosynthesis only occurs in the upper approximately \_\_\_\_\_ m of the ocean.
- (13) \_\_\_\_\_ is particles of dead animals and plants that drift down from the upper ocean.
- (14) Water temperatures in the deep ocean are \_\_\_\_\_ °C and can be \_\_\_\_\_ times the surface pressure.
- (15) Only approximately \_\_\_\_\_% of potential surface food (organic matter) reaches the continental shelf sea floor.
- (16) Deep sea floor consumers are dominated by \_\_\_\_\_, including sea cucumbers, brittle stars and sea urchins. They are among the most numerous animals on the planet.

- (17) The chimaeras, a relative of the shark, (and many other organisms on the deep ocean floor) uses \_\_\_\_\_ and \_\_\_\_\_ to detect prey.
- (18) Most large organisms including fish in the deep sea are \_\_\_\_\_.
- (19) The abyssal plain (the deepest part of the ocean) covers \_\_\_\_\_ of the earth's surface.
- (20) There are \_\_\_\_\_ times fewer animals on the abyssal plain than on the continental slope.
- (21) Extra credit: \_\_\_\_\_ was the name of Dumbo's friend in the Disney movie of the same title.
- (22) \_\_\_\_\_ are the largest geological feature on the planet.
- (23) Hydrothermal vents support that life that can live at temperatures as high as \_\_\_\_\_ °C
- (24) Three animals that live on hydrothermal vents are \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.
- (25) Hydrothermal vents do not use photosynthesis as an energy source, they use \_\_\_\_\_. The bacteria and other microbes that do this use \_\_\_\_\_ in combination with oxygen for energy.
- (26) \_\_\_\_\_, in combination with oxygen, is used by microbes in cold seeps for the production of biological energy.