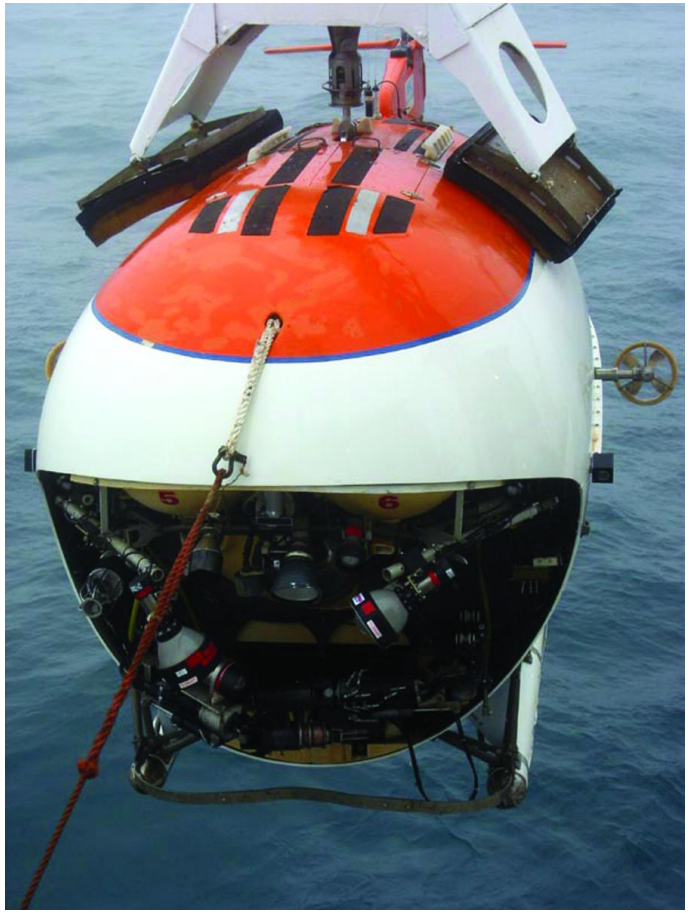
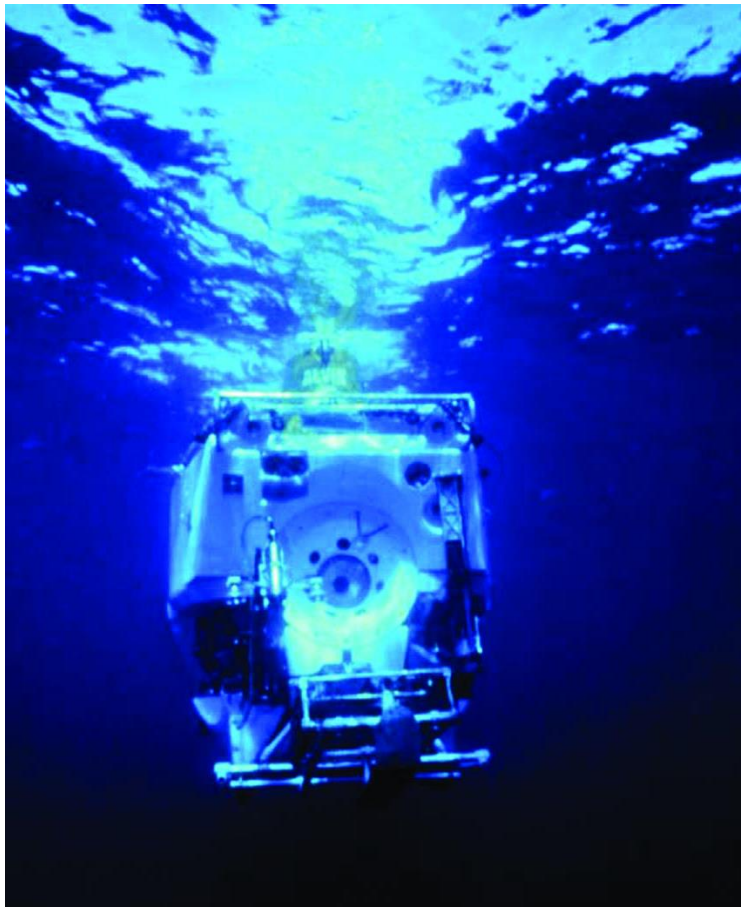
Thermohaline Circulation Introduction

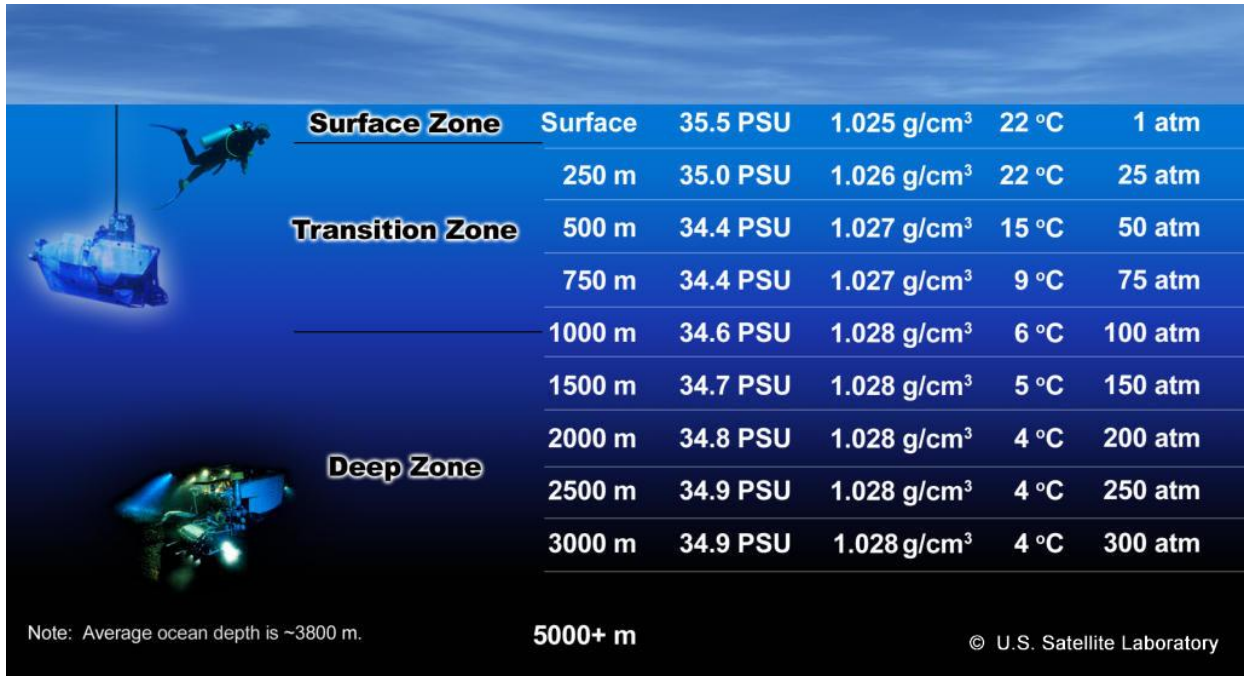
1. If you were to travel in a submersible, how would the ocean change as you went deeper?
2. Looking at the pictures, what are some of the features you observe with respect to the construction of the submersibles?
3. What do you think are the purposes of each the above features you observe?





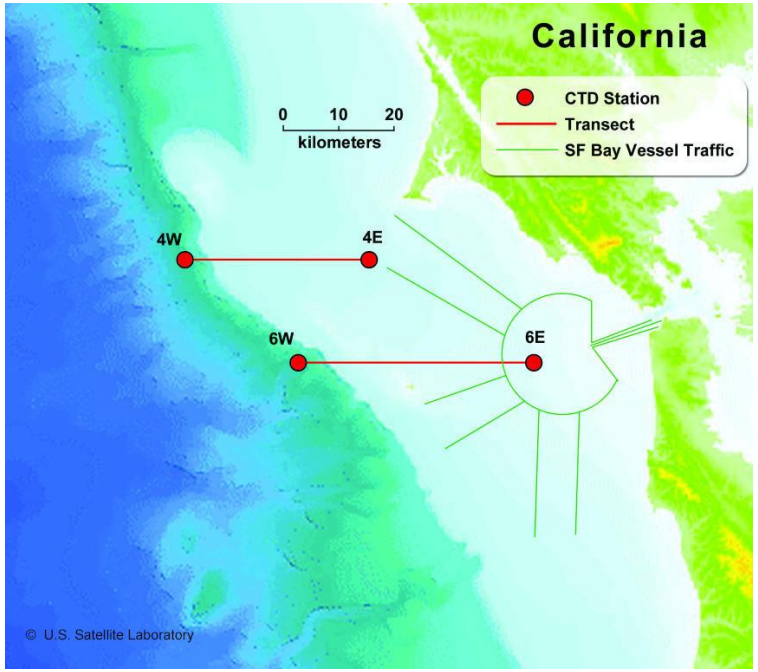
Thermohaline Circulation
GP: Variations in the Ocean

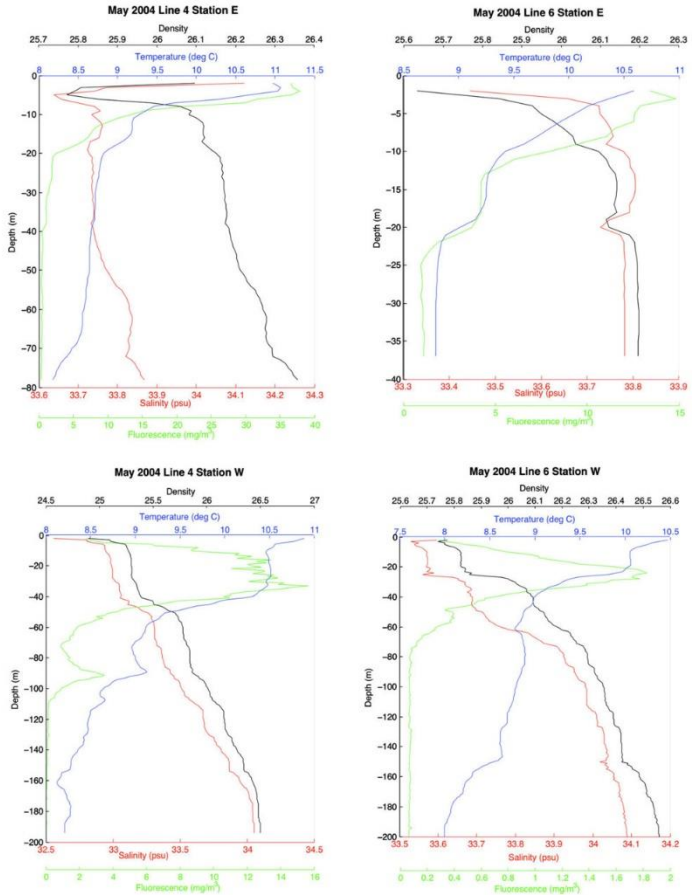
Using the information provided on page 231 in the Marine Science: The Dynamic Ocean textbook, complete questions 3 – 10 on page 232.



Thermohaline Circulation
GP: Deep Ocean Circulation

Read pages 233 through 237 in the Marine Science: The Dynamic Ocean textbook and complete questions 7 – 17 on pages 239 – 242.





Thermohaline Circulation Independent Practice

1. What are the three main layers of the ocean? Describe the conditions at each layer.
2. Explain the relationship between the depth of water and its temperature, density, salinity, pressure, and available light.
3. What is bioluminescence? How does it help organisms living in the deep?
4. Identify two environmental conditions of the Deep Sea. For each, give one example of how organisms cope with the conditions.
5. What is thermohaline circulation? What is the great ocean conveyor?