

Name: _____

Block: _____

Marine Ecosystems & Ocean Exploration Practice Questions

1. What is an estuary?

- a. a coastal area where fresh from a river mixes with salt water from the ocean
- b. a tropical grassland with scattered clumps of trees
- c. a river that flows into a larger river
- d. a landform at a high elevation where water drainage is optimal

2. How do nutrients move in an area of upwelling?

- a. Nutrients are brought up from deep, colder areas to warm, shallow areas
- b. Nutrients sink down from warm, shallow areas to deep, colder areas
- c. Nutrients are created in the neritic zone and pushed inland to the intertidal zone
- d. Nutrients move from the open ocean into estuaries

3. Which of the following ocean exploration technologies incorporate the use of sound waves to locate objects?

- a. Remote Sensing
- b. Global Positioning System (GPS)
- c. Remotely Operated Vehicles
- d. Sonar

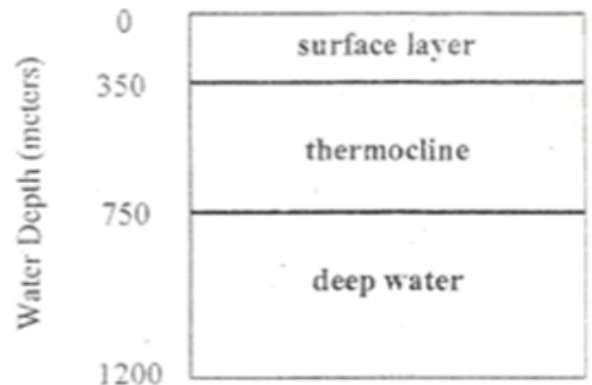
4. The population density of marine life is greater along the shoreline of the ocean than farther out in the deep waters of the ocean. Which statement provides the best explanation for this population distribution?

- a. ocean currents prevent many smaller marine organisms from living in deep water
- b. the shallow waters have fewer predators
- c. coastal water is less polluted than the deeper waters of the ocean
- d. there are more nutrients, oxygen and sunlight in the shallow water

5. The diagram shows the three layers of the ocean and their depths.

Which statement is most likely true about this part of the ocean during the summer?

- a. The surface layer is cooler than the thermocline
- b. The deep water is warmer than the surface layer
- c. The deep water is colder & more dense than the surface layer
- d. The surface layer is colder & more dense than the thermocline



6. Recent exploration of the deep ocean has uncovered unlikely ecosystems thriving around which deep ocean feature?

- a. Underwater volcanoes
- b. Deep ocean trenches
- c. The Mid-Ocean Ridge
- d. Hydrothermal vents

7. Animals that survive in these deep ocean ecosystems do so without sunlight. Instead they use a process called _____ to convert chemicals to energy.

- a. Photosynthesis
- b. Scuba
- c. Chemosynthesis
- d. Bioluminescence

8. What could be considered a valid reason to fund more ocean exploration?

- a. The abundance of valuable resources that could be found
- b. The new species that could be discovered
- c. The historical knowledge that could be gained
- d. All are valid reasons to further fund ocean exploration

9. Which organism provides the basis of open ocean food webs and also contributes to the majority of the world's oxygen supply?

- a. Coral reefs
- b. Sea horses
- c. Phytoplankton
- d. Krill

10. What are some of the challenges that help explain why only between 5-10% of the ocean has been explored? List & explain at least 3!