

# FIRST SEMESTER REVIEW OCEANOGRAPHY

Mrs. Butler

2008-2009

## MATCHING YOU MAY USE THE ANSWERS MORE THAN ONCE

A. Producer B. Consumer C. Decomposer D. Nutrient

1. Seaweed
2. Shark
3. Phytoplankton
4. Whale
5. Bacteria
6. Jellyfish
7. Crab
8. Copper
9. Worm
10. Turtle
11. Phosphorus
12. Red Algae
13. Zooplankton



"Although the Weather Service hasn't predicted rain, certain indicators can't be ignored."

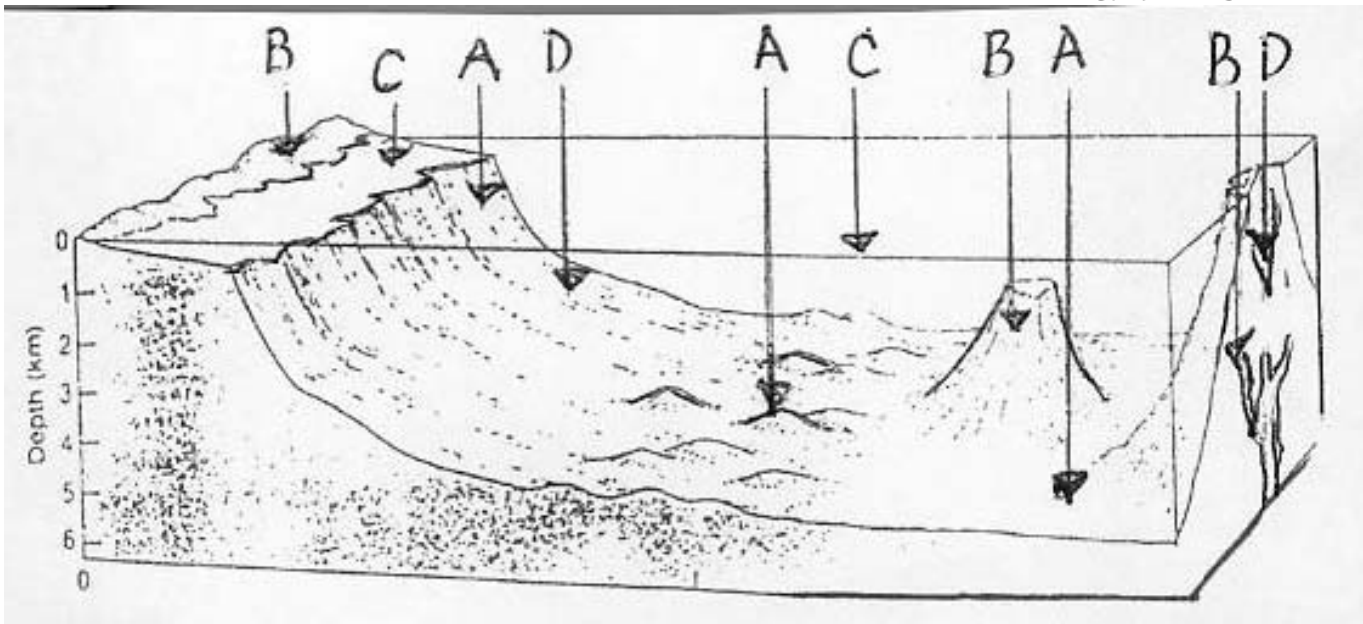
**USE THE DIAGRAM BELOW TO ANSWER THESE QUESTIONS**

Locate the;

- 14. Continent Rise
- 15. Continental Slope
- 16. Continental
- 17. Continental Shelf
- 18. Sea Level
- 19. Abyssal Hills
- 20. Abyssal Plain
- 21. Island
- 22. Guyot
- 23. Seamount



"Don't you find people watching people relaxing."



**MULTIPLE CHOICE**

24. When there is an accident in the laboratory. it is important to report the accident\_\_\_\_\_

- a. when there is enough time
- b. after telling another classmate
- c. before continuing the experiment
- d. immediately.

25. Be alert and proceed with \_\_\_\_\_ at all times in the science laboratory is a rule to remember.

- a. determination
- b. care
- c. caution
- d. haste

## MULTIPLE CHOICE

26. When working with dangerous chemicals, the student should \_\_\_\_\_

- a. wear chemical goggles
- b. read the instructions three times
- c. never taste , touch, or smell them
- d. all of these.

27. If there is broken glass in the laboratory the student should tell the teacher and \_\_\_\_\_

- a. use a dustpan and brush
- b. pick it up with cotton
- c. have your lab partner pick it up
- d. have the teacher clean it up.

28. Be aware of the location of the emergency shower, eye wash, fire blanket, and the \_\_\_\_\_

- a. emergency exit door
- b. fire extinguishers
- c. chemical safety goggles
- d. wash basin or sink.

29. The minimum size tank for a saltwater aquarium is \_\_\_\_\_ gallons.

- a. 40
- b. 10
- c. 20
- d. 55

30. One of the best types of filter systems for the marine aquarium is the \_\_\_\_\_

- a. under gravel filter
- b. outside filter
- c. use of algae eaters
- d. power filter

31. Aquarium gravel is useful in the tank because \_\_\_\_\_

- a. bacteria can grow there
- b. it acts as a buffer
- c. it traps suspended particles
- d. all of these

32. Remember never use of any kind \_\_\_\_\_ in the aquarium.

- a. artificial salts
- b. detergents
- c. chemicals
- d. igneous rocks



"Didn't I tell you to take up some hobby other than bowling?"

**TRUE FALSE ANSWER "A" FOR TRUE OR "B" FOR FALSE**

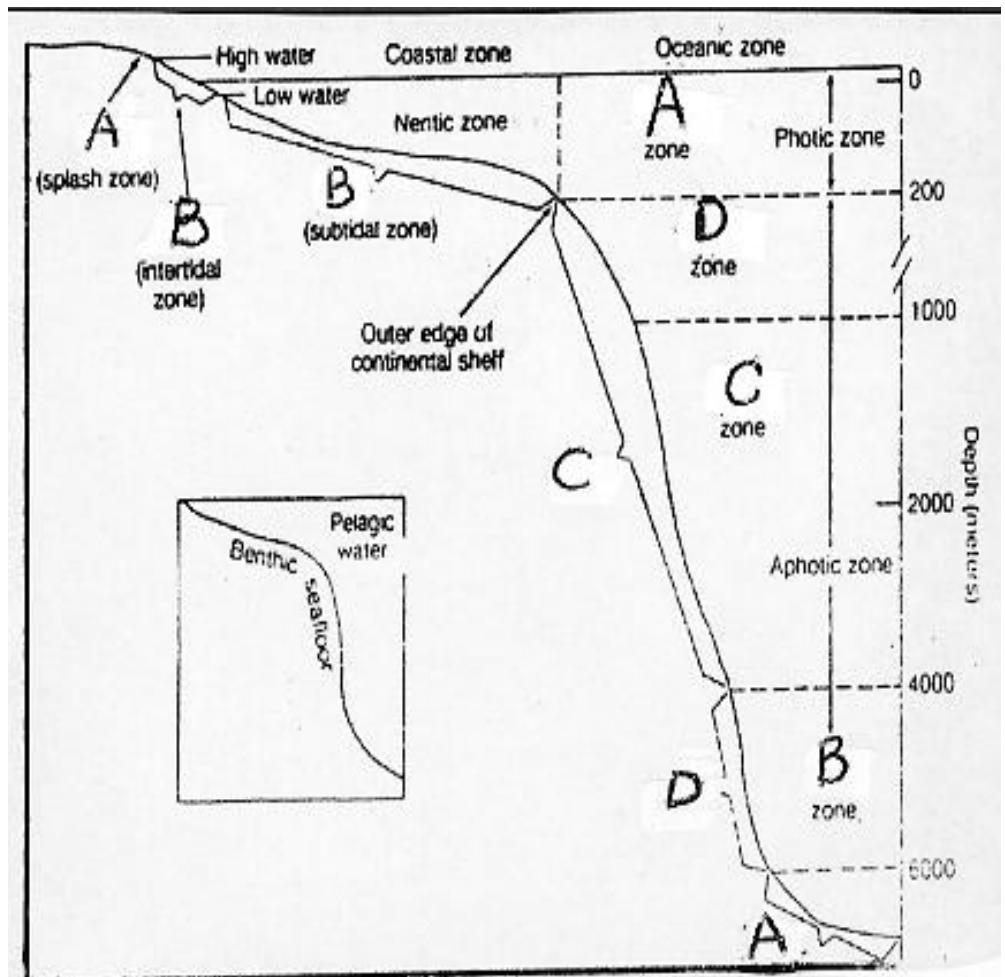
33. Echolocation is a method of locating other organisms which is used by some marine mammals.
34. Some fish that live in the ocean's depths actually adapt to the pressure by having gelatinous tissue instead of bones.
35. All of the physical characteristics which we studied are natural occurrences that effect or are a part of the oceans.
36. Ice is more dense than liquid water.
37. It is known that shorter wavelengths ( blue/green) are able to extend to deeper depths than the longer wavelengths.
38. Waters in the ocean that are colored brown or yellow are colored that way due to the angle of the sunlight shining on the surface of the water.
39. Anoxic refers to a lack of carbon dioxide
40. Temperature changes will limit where marine life can survive.

**USE THE DIAGRAM BELOW TO ANSWER THESE MATCHING QUESTIONS**

41. Sublittoral zone
42. Abyssal zone
43. Bathyal zone
44. Supralittoral zone
45. Littoral zone

**SEPARATE MATCHING**

46. Mesopelagic zone
47. Epipelagic zone
48. Bathypelagic zone
49. Abyesso-Pelagic zone
50. Hadal zone



## MATCHING MAKE THE BEST SELECTION

- |                      |  |
|----------------------|--|
| 51. Sand Beach       | A. Has rotten odor also called Wetlands                |
| 52. Intertidal Flats | B. Several sections shift and has grasses to anchor it |
| 53. Salt Marsh       | C. Animals cling and attach to this strong surf zone   |
| 54. Sand Dune        | D. Possesses strong surf, wind& burrowing organisms    |
| 55. Rock Jetty       | E. Emerges and submerges with the tide                 |

## MATCHING CHOOSE THE BEST ANSWER

- |                                |                       |
|--------------------------------|-----------------------|
| 56. Washington D.C.            | A. James River        |
| 57. Original River             | B. Choptank River     |
| 58. Western Shore              | C. Potomac River      |
| 59. Norfolk and Virginia Beach | D. Susquehanna River  |
| 60. Eastern Shore              | E. Rappahannock River |

## TRUE FALSE answer A for True and B for False

61. The Chesapeake Bay is a semi- enclosed body of water called a sound.
62. There are three states which make up the drainage basin
63. The upper portion of the Chesapeake Bay near the Susquehanna River is less salty than the lower portion of the bay.
64. The wetlands make wonderful nursery grounds for many species.
65. Each year the salt marsh produces food for migratory birds.
66. The two main dangers to the ecology of the Chesapeake Bay are fertilizers and plastics.
67. The two kinds of birds that became extinct due to excessive hunting in the Chesapeake Bay area were the passenger pigeon and the Carolina parakeet.
68. S.A.V. is the abbreviation for Submerged Aquatic Vegetation.
69. The Chesapeake Bay runs in a East West direction.
70. The origin for the fresh water for the Chesapeake Bay is in the Smoky Mountains.

## MULTIPLE CHOICE -CHOOSE THE BEST ANSWER

71. Plate movement is driven by this force
  - a. pressure
  - b. volcanoes
  - c. earthquakes
  - d. convection cells
  
72. Divergence is plate movement which occurs when plates
  - a. move away from each other
  - b. move toward each other
  - c. move beside each other
  - d. move very slowly.



"Some people save stamps or coins.  
I save whales."

**MULTIPLE CHOICE -CHOOSE THE BEST ANSWER**

73. Convergence is plate movement which occurs when plates

- a. move away from each other
- b. move toward each other
- c. move beside each other
- d. move very slowly.

74. Lateral or Transform Fault is plate movement which occurs when plates

- a. move away from each other
- b. move toward each other
- c. move beside each other
- d. move very slowly.

75. Proof for both the Continental Drift Theory, and the Plate Tectonics Theory was found in all of these sources EXCEPT \_\_\_\_\_

- a. soil
- b. fossils
- c. coal deposits
- d. glaciers

76. The proof for the Continental Drift Theory, and the Plate Tectonic Theory was used to explain \_\_\_\_\_

- a. how old the oceans are
- b. how evolution began
- c. how the plates moved
- d. how magma was formed

77. The Earth's crustal plates float on the liquid part of the upper mantle called the

- a. asthenosphere
- b. lithosphere
- c. hydrosphere
- d. atmosphere

78. Rigid plates which hold our oceans and continents together are pieces of the

- a. asthenosphere
- b. lithosphere
- c. hydrosphere
- d. atmosphere

## MATCHING

- |                              |             |
|------------------------------|-------------|
| 79. <u>Mass</u><br>Volume    | a. Sound    |
| 80. 1,500 m/sec              | b. Light    |
| 81. 200 m                    | c. Density  |
| 82. 1.0278 g/cm <sup>3</sup> | d. Salinity |

## TRUE or FALSE Answer "A" for True or "B" for False

83. One of the larger, older submersibles was named the Archimede.
84. Scripps Institute of Oceanography is located in Washington state.
85. The Trieste was very expensive, rather large, and had no escape pod.
86. In 1860, Charles Darwin classified, collected and studied various organisms while he was aboard the H.M.S. Retriever.
87. Matthew Maury wrote The Physical Geography of the Sea, and is considered to be the first oceanographer.
88. Aboard the Fram, Captain Nansen conducted research which was helpful in constructing the first submersibles.
89. The International Geophysical Year, which encouraged nations to join one another in research, occurred in 1984.
90. Both Thomson and John Murray made significant scientific discoveries still used today when they sailed around the world on the H.M.S. Challenger

## MATCHING

- |                             |                |
|-----------------------------|----------------|
| 91. Deep ocean level        | A. Plankton    |
| 92. Floating organisms      | B. Nekton      |
| 93. Area of usable light    | C. Benthos     |
| 94. Free swimming organisms | D. Photic zone |

## MULTIPLE CHOICE

95. Bottom dwellers such as catfish and flounders live in the \_\_\_\_\_
- Plankton
  - Nekton
  - Benthos
  - Neritic
96. A good definition of a Food Web would be \_\_\_\_
- an interacting and interdependent group of organisms
  - an insect caught by a spider
  - how one animal eats another
  - all of these

97. Without this part of the Food Web the organisms would be unable to break down into nutrients\_\_\_\_\_

- a. sediment
- b. light
- c. decomposers
- d. warm temperatures

98. Nutrients are used by \_\_\_\_\_to continue the Food Chain

- a. bacteria
- b. small fish
- c. carnivores
- d. plants (phytoplankton)

99. A trophic level refers to \_\_\_\_\_

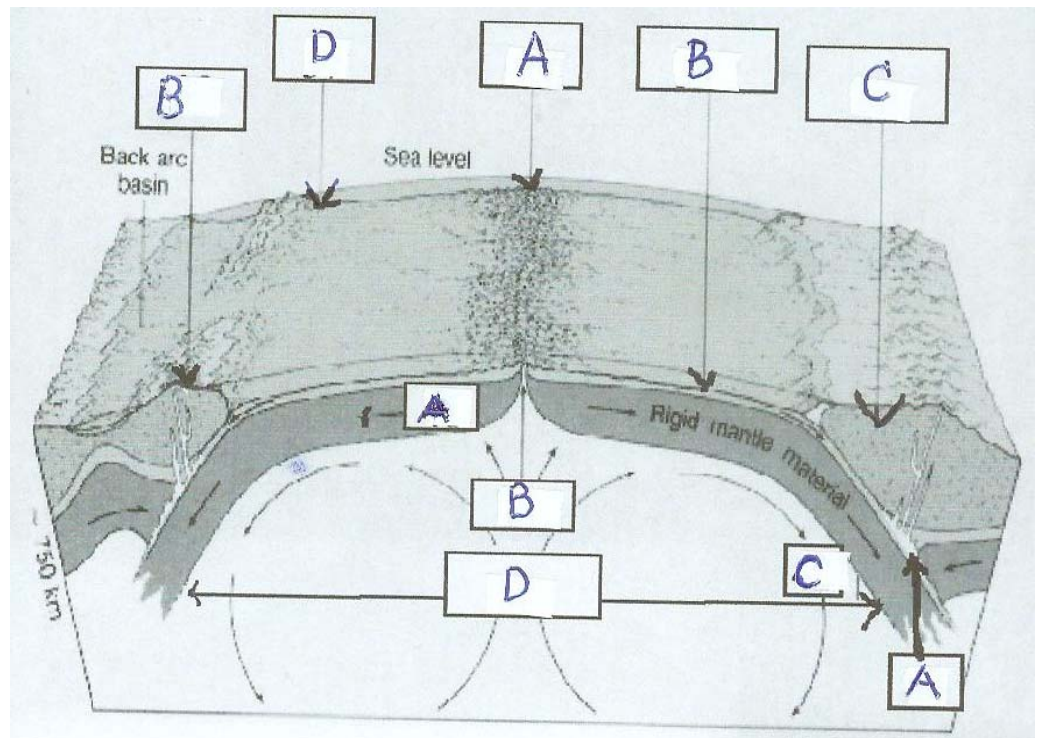
- a. a location in the ocean
- b. a certain level in the Food Chain
- c. the deep part of the ocean
- d. the depth that light penetrates into the ocean.

100. The movement in the Food Chain is from\_\_\_\_\_

- a. deeper to shallow
- b. shallow to deeper
- c. larger to smaller organism
- d. smaller to larger organism.

**MATCHING – Choose the best answer from the Chart**

- 101. Midocean ridge
- 102. Ascending magma
- 103. Deep-sea trench
- 104. Island arc system
- 105. Continental crust
- 106. Asthenosphere
- 107. Oceanic crust
- 108. Lithosphere
- 109. Convection cells
- 110. Subduction





## MULTIPLE CHOICE

111. These things are broken down to become nutrients in the ocean \_\_\_\_\_

- a. feces and decaying bodies
- b. rich sediments
- c. chemicals in the water
- d. hydrothermal vents.

112. At the very top trophic level of the Food Chain is \_\_\_\_\_

- a. the shark
- b. the barracuda
- c. the tuna
- d. the porpoise

113. The list of all known elements is called \_\_\_\_\_

- a. Atomic chart
- b. Periodic reference
- c. Elemental List
- d. Periodic chart

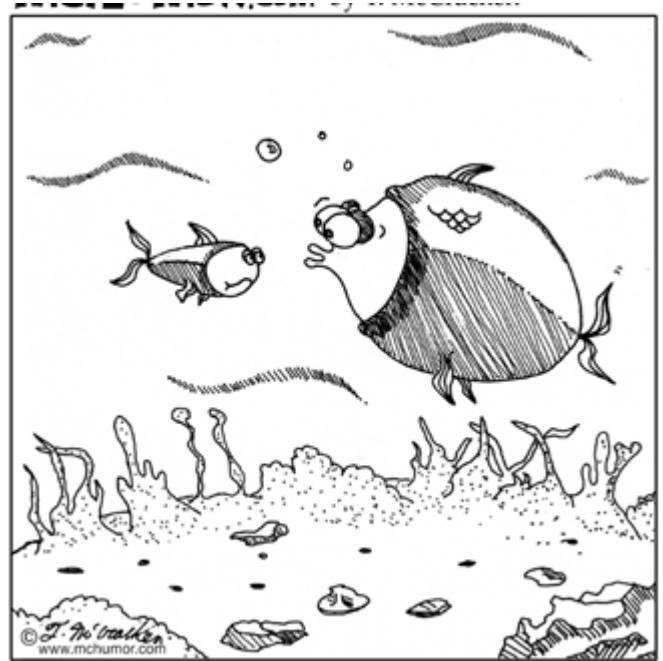
### **CHOICES for numbers 114-116**

**a. Proton b. Electron c. Neutron**

114. Carries a negative charge

115. Carries a neutral charge

116. Carries a positive charge



"I'm retaining air."

### **CHOICES for numbers 117 & 118**

**a. Proton b. Electron c. Proton and Neutron d. Proton and Electron**

117. Atomic number = \_\_\_\_\_

118. Atomic mass = \_\_\_\_\_ and \_\_\_\_\_

### **CHOICES a. Periods b. Groups**

119. Another name for Rows on the periodic chart.

120. Another name for Columns on the periodic chart.

## MULTIPLE CHOICE

a. Salinity   b. Density   c. Temperature   d. Light   e. Pressure

121. Is the factor that changes in the halocline
122. Has a dramatically increased effect in the vertical circulation within the ocean.
123. The bathythermograph which is towed behind a ship is an instrument that measures this characteristic.
124. Below 1,000 meters there is a very limited supply of this physical quality.
125. Some fish no longer have gas bladders to adapt to this forceful characteristic.

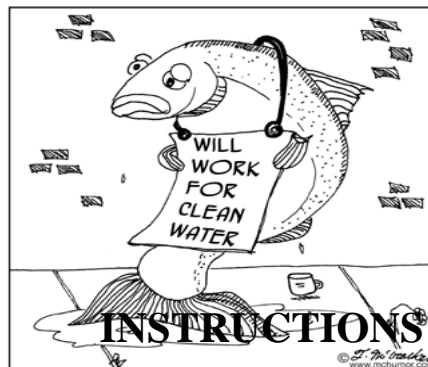
## MATCHING

- |                             |                |
|-----------------------------|----------------|
| 126. Has cations and anions | a. Sound       |
| 127. Has a pycnocline       | b. Temperature |
| 128. Photic zone            | c. Salinity    |
| 129. Heat capacity          | d. Light       |
| 130. Depth recorder         | e. Density     |

## SHORT ANSWER ESSAYS

Write your answers in thorough sentences for **Four of the Eight choices listed below. Use a separate paper and include your Name, Test Version and Block Number.**

1. Describe, and give examples of the **THREE** major types of Plate Tectonic movement.
2. Explain how the deep ocean is explored and discuss some unusual features of the floor.
3. Draw and label an Oceanic Food Web giving all of the major **Four** parts to the cycle.
4. Explain why the Chesapeake Bay is such an important estuary- mention names of rivers, animals found here, size etc.
5. Name the most interesting Oceanic Historical person that we studied, and explain why you chose this person.
6. Mention at least **Four** of the Habitats in our area, and discuss why they are different.
7. Discuss **Three** locations on Earth that have had recent destructive plate tectonic activity.
8. What are **Four** factors that endanger the future of the Chesapeake Bay?



## Value of questions

1. Each of the 130 Objective questions is worth 0.7 points = 91 points.
2. Each of the 4 Essay questions is worth 2.5 points = 10 points.
3. Total number of points possible is 100 points. 101 points total

## Procedure

1. If any student cheats by copying answers then the result will be a zero on the Exam.
2. No student is allowed to ask any other student a question about the Exam. Any question must be addressed to the teacher only.
3. Each student should examine the ENTIRE Exam before answering to better understand the length and types of questions.
4. Monitor the time and look for clues in previous questions to other questions.
5. Leave no questions unanswered.
6. Circle any erasers which may cause an error in grading.
7. Carefully read and reread the Essay questions. Usually more than one answer is required.
8. Before you hand in the Exam be certain that you have completed the Scantron information such as name, date , block, version A or B, and that your name , date, etc is on your Essay paper.



"Bring me the sail maker!"