

- A. dissolved nutrients.
- B. dissolved salts.
- C. exposure to air.
- D. exposure to sunlight.

(23.10, A)

54. Deep-water marine organisms that produce their own light are called:

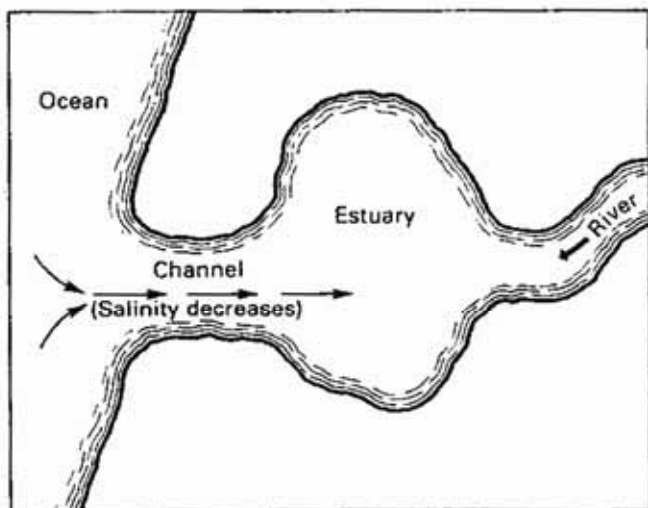
- A. bioluminescent.
- B. biosynthetic.
- C. photoelectric.
- D. photosynthetic.

(23.11, A)

For the next five items use the information, diagram, and table that follow.

(23.12, AI)

The salinity of the open ocean is about 3.5 percent. Some of the large rivers of the world do not enter the ocean directly. They open into tidal estuaries. Estuaries are passages where the ocean tide meets the river water. Chesapeake Bay and San Francisco Bay are examples of estuaries.



tuary into the ocean.

Animal	Salinity tolerated
Gar (fish)	0.0–0.1%
Crab	0.1–3.5%
Snapper (fish)	3.5–3.6%
Oyster	0.5–3.0%
Shrimp	1.0–5.3%

55. The animal that would be found only in the river is the:

- A. crab.
- B. gar.
- C. oyster.
- D. snapper.

(B)

56. The animal that would be found only in the ocean is the:

- A. crab.
- B. gar.
- C. oyster.
- D. snapper.

(D)

57. The animal most likely to be found only in the estuary is the:

- A. crab.
- B. oyster.
- C. shrimp.
- D. snapper.

(B)

58. The shrimp might be a food source for:

- A. the gar in the river.
- B. other predatory river animals.
- C. the snapper in estuary waters.
- D. the snapper in the ocean.

(D)

- A. crab.
- B. gar.
- C. oyster.
- D. shrimp.

(C)

60. Biotically, the chief value of the oceans to human beings is as a source of:

- A. ecological competition.
- B. food.
- C. recreation.
- D. waste-dumping sites.

(23.12, B)

61. Abiotically, the chief value of the oceans to human beings is as a source of:

- A. minerals.
- B. offshore oil.
- C. rainfall.
- D. salt water.

(23.12, C)

62. Aquatic organisms have relatively stable abiotic conditions in their environments. An exception is the organisms that live in the ocean's:

- A. deep waters.
- B. littoral zone.
- C. mid-depths.
- D. open surface waters.

(23.14, B)

The next 12 items are statements about marine environments. Use the key below to identify the indicated environments.

(23.10–23.14)

KEY: A. littoral zone
 B. ocean depths
 C. offshore waters
 D. open surface waters

- 64. This environment is exposed to air twice a day:
(A)
- 65. This environment, despite limited nutrients, is so great in expanse that most of the world's photosynthesis occurs in it:
(D)
- 66. This environment is covered by water twice a day:
(A)
- 67. The organisms in this environment have no enclosed air spaces or air-filled tissues in their bodies:
(B)
- 68. Available nutrients would support more phytoplankton in this environment if the organisms would not be dashed to death on sand or rocks:
(A)
- 69. Available nutrients support rich growths of phytoplankton in this environment:
(C)
- 70. The only organisms in this environment are consumers:
(B)
- 71. Light reaches the bottom in many but not all places in this environment, supporting populations of giant kelp and other seaweeds:
(C)
- 72. The only producers in this environment are phytoplankton:
(D)