

Multiple Choice: Circle the most correct answer.

One part per million ... (2 points)

- A. Is a measure of concentration.
- B. Is equivalent to 1 mg/L.
- C. Is typically a measure of weight
- D. A and B are correct.
- E. All of the above.

Match the correct term to its definition (1 point each)

Oligotrophic _____

A. High biological activity

Mesotrophic _____

B. Low biological activity

C. Medium biological activity

The lake to the right can be described in what ways? (2 points)

- A. Has a D_L index close to 1
- B. Has lots of littoral (shoreline) organisms
- C. Has lots of pelagic (open water) organisms
- D. Is probably formed by glaciers
- E. None of the above.



At the boundary between the photic and aphotic zones (2 points)

- A. Photosynthesis = respiration
- B. Light is 1% of that at the surface (i.e., completely dark)
- C. Light is 0% of that at the surface (i.e., completely dark)
- D. A and B are correct
- E. None of the above

A stream meander... (2 points)

- A. Is more pronounced in low gradient areas
- B. Involves consistent riffle-pool pairs
- C. Is created by process of erosion and deposition
- D. A and B are correct
- E. All of the above.

The metalimnion of a lake (2 points)

- A. Is the warmest point
- B. Is the coldest place
- C. Has consistently high oxygen concentrations
- D. Is the location of rapid temperature change
- E. None of the above.

Waves are influenced in the following ways (2 points)

- A. Height influences whether it is a gravity wave or ripple
- B. White caps occur at a constant height of 1.2 m
- C. The crest depends on temperature
- D. Wavelength influences whether it is a gravity wave or ripple
- E. A and B are correct

Short definition. Answer in 1-2 sentences

Fetch (3 points)

Limnology (3 points)

Short essay. Answer each in a few sentences; diagrams are always useful

Describe how the characteristics of light change from the surface of a lake to the bottom (15 points).