Name:
Date:
Class:

Lesson 15.4: Water Quality

Know and Understand

Answer the following questions using the information provided in this lesson.

1. Which nutrient most directly affects crop yields? (15.4.1)

A. Water
B. Nitrogen
C. Carbon
D. Zinc

Answer:

2. Which factor is not measured to determine the health of a stream? (15.4.2)

A. Dissolved carbon
B. Dissolved oxygen
C. pH
D. Both A and B.

Answer:

3. What occurs with aquatic life if the water temperature moves outside the preferred temperature range? (15.4.2)

A. Aquatic life will move on to other more suitable environments.
B. Aquatic life will die in that particular area.
C. Both A and B.
D. Neither A nor B.

Answer:

4. *True or False?* Heated industrial discharge water is the primary reason water temperature is raised in rivers and streams. (15.4.2)

Answer:

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5. How does runoff from roads and other paved surfaces affect water temperatures of streams and rivers? (15.4.2)

A. It will be much hotter than water coming off any other surface.

B. It will be much cooler than water coming off any other surface.

C. It will be about the same temperature as water coming off any other surface.

D. None are correct.

Answer:

6. How does oxygen become dissolved in water? (15.4.2)

A. Hot water increases dissolved oxygen.

B. Fish expel oxygen, thereby increasing the levels of oxygen in water.

C. Plants produce oxygen which is absorbed by the water.

D. Turbulence and waves increase dissolved oxygen.

Answer:

7. What is the relationship between water temperature and dissolved oxygen? (15.4.2)

A. Water that is cooler carries more oxygen than warmer water.

B. Water that is warmer carries more oxygen than cooler water.

C. Slow-moving water carries more oxygen than fast-moving water.

D. Sunlit water carries more oxygen than shaded water.

Answer:

8. Which suspended solids affect water quality? (15.4.2)

A. Nitrates

B. Microinvertebrates

C. Soil and algae

D. Macroinvertebrates

Answer:

9. How does the water's pH affect biological availability? (15.4.2)

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A. pH affects the biological availability of nutrients.
B. pH affects fish reproduction.
C. pH affects sunlight penetration and turbidity.
D. Because water flows in a stream, pH is unimportant and constantly changing.

Answer:

10. What are the two most concerning nutrient pollutants in water? (15.4.2)

A. Phosphorus and potassium
B. Phosphorus and nitrogen
C. Nitrogen and potassium
D. Carbon and dihydrogen oxide

Answer:

11. How do animal and human fecal matter enter a waterway? (15.4.2)

A. Manure runoff
B. Failing septic systems
C. Municipal discharge
D. All are correct.

Answer:

12. Why are macroinvertebrates good indicators of water quality? (15.4.2)

A. They tolerate poor water quality.
B. They are easy to see and count.
C. Some require high-quality water, while others tolerate poor-quality water.
D. They are inconsequential to food webs.

Answer:

13. Which of the following water contaminants tend to come from agriculture? (15.4.3)

A. Carbon
B. Sediment

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C. Seltzer

D. All are correct.

Answer:

14. What is the difference between point source and nonpoint source pollution? (15.4.3)

A. Point source pollution has a single source that can be identified.

B. Nonpoint source pollution has many sources.

C. Nonpoint source pollution is more detrimental than point source pollution.

D. Point source pollution is discharged from a pipe, like thermal pollution.

Answer:

15. How can farmers lessen the effect of fertilizer runoff? (15.4.3)

A. Eliminating thermal pollution from farms.

B. Increasing irrigation.

C. Reducing erosion and sediment running off of farm fields.

D. Following label directions when applying fertilizer.

Answer:

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