

Name:

Class:

Date:

Lesson 14.3: Ecological Cycles

Lesson Review

Carefully study the lesson and then answer the following questions.

1. What is a biogeochemical cycle? (14.3.1)

Answer:

2. *True or False?* A cycle is a circular flow of information used to create chemicals. (14.3.1)

Answer:

3. *True or False?* The biosphere is the accumulation of all of Earth's ecosystems. (14.3.1)

Answer:

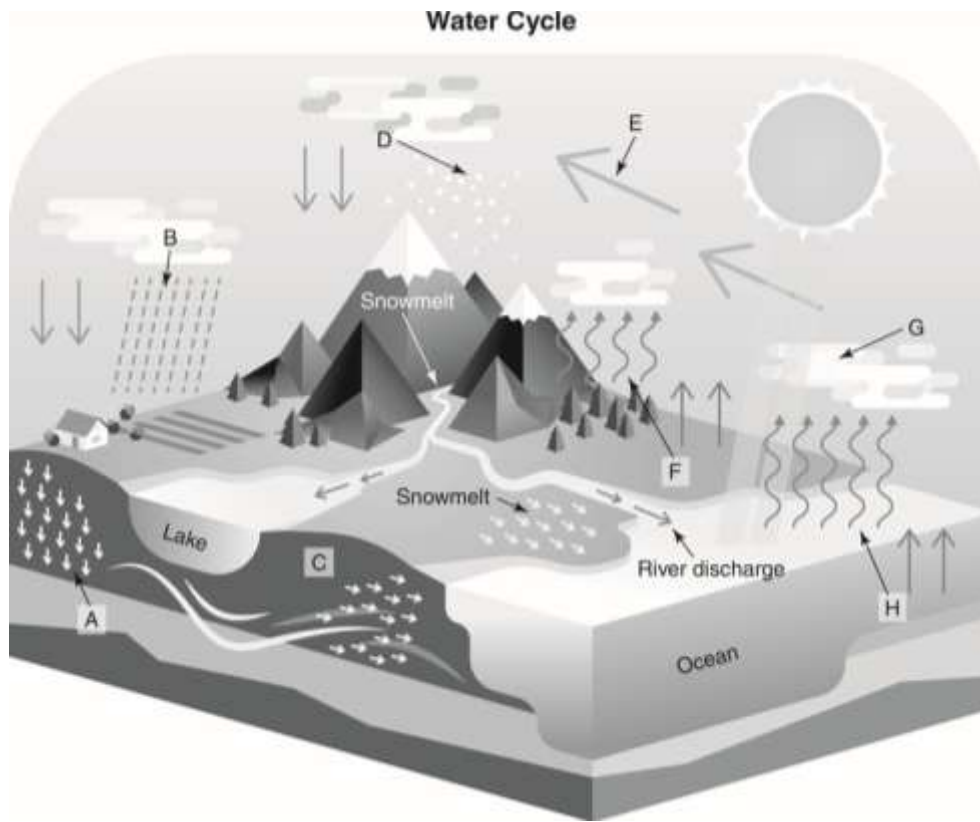
4. *True or False?* The total amount of nitrogen, carbon, oxygen, and water is completely unstable. (14.3.1)

Answer:

5. *True or False?* The usable and clean quantities of important nutrients are always in flux. (14.3.0)

Answer:

Identify the components of the water cycle. (14.3.2)



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6. Condensation

Answer:

7. Evaporation

Answer:

8. Percolation

Answer:

9. Infiltration into groundwater

Answer:

10. Precipitation

Answer:

11. Deposition

Answer:

12. Transpiration

Answer:

13. Transport

Answer:

14. What portion of the water on Earth is frozen? (14.3.2)

- A. 1/4
- B. 1/2
- C. 3/4
- D. 7/8

Answer:

15. The process used to remove salt from seawater is called _____. (14.3.2)

- A. hydrology
- B. precipitation
- C. compression
- D. desalination

Answer:

16. Groundwater is stored in underground reservoirs called _____. (14.3.2)

- A. aquifers
- B. groundwater
- C. gaseous water
- D. water caves

Answer:

17. What is the difference between runoff water and surface water? (14.3.2)

Answer:

18. *True or False?* Acid rain can be a natural phenomenon. (14.3.2)

Answer:

19. *True or False?* Lakes are large enough that acid rain can have no bearing on their overall acidity. (14.3.2)

Answer:

20. *True or False?* Water rights are of greater concern in areas with a limited water supply. (14.3.2)

Answer:

21. *True or False?* Plants can obtain and use nitrogen directly from the atmosphere. (14.3.3)

Answer:

22. Explain what happens in each of the four stages of the nitrogen cycle. (14.3.3)

A. Fixation

Answer:

B. Ammonification

Answer:

C. Nitrification

Answer:

D. Denitrification

Answer:

23. What two problems can excess nitrogen in water supplies cause? (14.3.3)

Answer:

24. Explain the difference between a carbon pool, a carbon sink, and a carbon source. (14.3.4)

A. Carbon pool

Answer:

B. Carbon sink

Answer:

C. Carbon source

Answer:

25. *True or False?* Of all the carbon pools, the carbon held in carbon sinks causes the most concern for human life. (14.3.4)

Answer:

26. *True or False?* Carbon dioxide and methane are among the most dangerous greenhouse gases. (14.3.4)

Answer:

27. List three types of methane sources in the atmosphere. (14.3.4)

Answer:

Critical Thinking

1. The carbon credit system allows companies to examine their carbon usage. What are some things that agriculturalists could do to decrease their carbon usage? (14.3.4)

Answer: