

Sustainable Water Quiz

True or False:

- False** 1. The Illinois water law has strict limits on how much water can be used.
- True** 2. Water is a precious resource and we take it for granted that water will flow when we turn on a faucet.
- False** 3. The average rainfall in the summer is not affected by droughts.
- False** 4. Most water in homes is used for showers.
- True** 5. The unit of measurement used to quantify how much water is used is mgd or millions of gallons of water per day.
- True** 6. Rainfall, surface waters and groundwater are linked together through the water cycle.
- False** 7. It is not important to conserve water because water is plentiful.
- True** 8. When water is pumped from an aquifer the water pressure decreases.
- False** 9. A good way to conserve water is to leave the faucet running when you brush your teeth.
- True** 10. Your home water bill consists of water and sewage usage.
- False** 11. Water availability will not be a problem for future generations.
- True** 12. Sustainability means planning for the future and maintaining and improving our water supply in order to protect the environment.

Multiple Choice Questions:

- A** 13. All of the following are ways to conserve water except:
- A. Washing clothes and not selecting the appropriate water level
 - B. Only running a full dishwasher
 - C. Putting a brick in the toilet tank
 - D. Washing a small load of clothes
- C** 14. How many counties belong to the East-Central Illinois region?
- A. 19
 - B. 24
 - C. 15
 - D. 12
- A** 15. Why are Dams built?
- A. To store large amounts of water in reservoirs or man-made lakes
 - B. To attract people to a place, as a tourist attraction
 - C. To block water from getting into a town
 - D. To distract people from coming due to the dam being an eye sore
- C** 16. What is the average summer rainfall in East Central Illinois?
- A. 24 inches
 - B. 19 inches
 - C. 12 inches
 - D. 8 inches
- D** 17. What are the three r's to water conservation?
- A. Reduce, recycle, reorganize

- B. Reduce, reuse, resupply
- C. Reduce, Resupply, Redistribute
- D. Reduce, reuse, Recycle

Short Answer Questions:

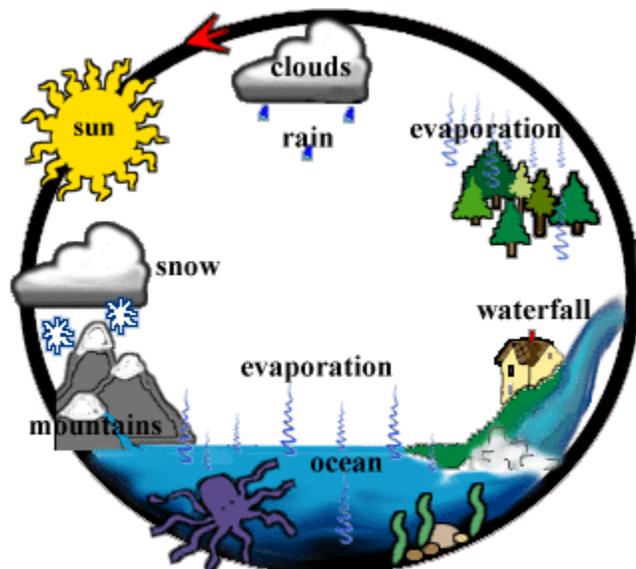
18. Why should you care about water supplies?

- a. Every day you need to drink clean water and you use a lot of water at home. You need a water supply that you can count on every day.
- b. Neither you nor your neighbors own water. Water is a common resource that we share.
- c. We extract water from various parts of the environment for our use and you can help protect the environment.
- d. About 1 million people live in East-Central IL and how much water is used depends entirely on the actions of each person, including you.

19. Draw the water cycle:

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Should include- evaporation, condensation, precipitation



20. Explain the water cycle.

- Evaporation occurs when water transforms from liquid to gas, usually as a result of the sun's warming rays. Evaporation often technically includes transpiration from plants (the vapor the "breathe" out as they grow), though together they are specifically referred to as evapotranspiration.

- Condensation occurs as the vapor rises into the atmosphere, creating clouds and fog. Once clouds are formed, advection -- the movement of water in its various states -- through the atmosphere. Without advection, the cycle would screech to a halt, as the water would evaporate and precipitate (the next step) in the same place.

- Precipitation occurs when the vapor that condensed comes back out of the sky as rain, snow, sleet, hail. Most of it comes back to the ground or body of water, but some of it is intercepted by plant foliage and evaporates back to the atmosphere instead of making it to the ground, in a process called "canopy interception."

- Runoff is the process by which water moves across land and includes both surface runoff -- when water travels over land -- and channel runoff -- when it gets into streams and rivers. As it bubbles and rambles along, it can drain into the ground, evaporate into the air, run into and become stored in lakes or reservoirs, or be gathered up for human uses.

21. Illinois water law governs how we can extract water from the environment and use water, but the law is not always clearly defined. Why is this a problem?

Nobody owns water. The law says that it must be reasonable use- not wasteful. That leaves the barn door wide open as to what "reasonable" means. Conflicts are settled in court. And there are no state standards that limit groundwater withdraws.

22. Why is it a problem if there is a drought in the summer?

If there is a drought in the summer, less water is available. In the summer we have a warmer climate so the water goes through the water cycle at a much faster rate. A drought does not allow for water to be built up in an aquifer. Instead a drought causes us to lose much of our backup water supply. Droughts also cause problems for farmers who may have planted crops and they have died to lack of rain.

23. How does flooding cause problems?

Flooding too causes a problem. The water cannot absorb the water fast enough. Causing a lot of run-off. Flooding causes problems for farmers who might lose crops and have to replant.

24. Where does your water come from?

Answers will vary.

25. Write a conservation plan for you and your family.

Answers will vary, but might include:

- a. You can install low flush toilets that use less water.
- b. You can install low pressure shower heads and take shorter showers.
- c. When you wash clothes, make sure you set the appropriate water level for the amount of clothes you are washing.
- d. Only run the dish washer when it is full.
- e. Don't leave the faucet running at home, in school, or at work.