

CHECK YOUR IRRIGATION IQ

1. Does clean, purified water contain any substance other than H₂O?

- A. Yes
- B. No

2. The average family of four uses approximately __ gallons of water per day?

- A. 50
- B. 100
- C. 250
- D. 400

3. How much of the water on earth is available for people's everyday use?

- A. More than 50%
- B. 28%
- C. Less than 1%
- D. 12%

4. Which of the following uses less water?

- A. Taking a five minute shower
- B. Taking a bath

5. In the average household, which of the following wastes the MOST water per day?

- A. Running the tap while washing dishes
- B. Using a garbage disposal
- C. A leaky toilet
- D. Long showers

6. How much water used for irrigating lawns and gardens, on average, is wasted due to overwatering and evaporation?

- A. 50%
- B. 25%
- C. 15%
- D. 10%

7. A water-efficient irrigation system may include which features?

- A. Drip irrigation
- B. Moisture sensors
- C. Rain shut-off device
- D. All of the above



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8. Which types of water can be used to irrigate a public park?

- A. Potable water
- B. Gray water
- C. Recycled water
- D. Both A and C
- E. All of the above

9. What happens to the radius of a spray head when water pressure increases?

- A. The radius increases
- B. The radius decrease
- C. No change to the radius
- D. None of the above

10. How much static pressure is lost for each foot of elevation gained in an irrigation system?

- A. 0.50 psi
- B. 1.23 psi
- C. 0.43 psi
- D. 0.043 psi

11. What is the best method for duration of irrigation?

- A. Historical—how past generations irrigated
- B. To use the current water right
- C. Based on needs of the targeted crop

Answer Key:

- 1. B - No, even “pure water” is a mixture of 18 isotopes and 15 ions, 33 different substances in all.
- 2. D - The average person uses 100 gallons of water each day! This can easily be cut by as much as 30% if households take simple steps to use water more efficiently.
- 3. C - About 75 percent of earth’s surface is covered by water, but less than 1 percent is available for people to use. The rest is salt water, inaccessible underground or frozen in ice caps and glaciers.
- 4. A - A five minute shower uses 10 to 25 gallons of water while a full tub requires about 70 gallons.
- 5. C - A leaky toilet about 200 gallons of water per day!
- 6. A - Water efficient irrigation systems potentially save more than 11 billion gallons of water per year in the United States! This equals the amount of water used by 3,200 garden hoses flowing constantly for a full year!
- 7. D - Inefficient irrigation systems waste water and money. Drip irrigation is more efficient than mist.
- 8. D - Parks can be irrigated with potable or recycled water, but must post signs warning the public if using recycled water.
- 9. A - As water pressure increase the radius of spray increase. Most spray heads are designed to reach maximum performance at highest operating pressure.
- 10 C - Changing elevation can increase or decrease water pressure in an irrigation system. To calculate this change multiply the change in elevation in feet by 0.433 to get the change in psi. If the elevation change is upward, subtract the psi number from your static pressure. Add the psi number if the pipe is headed downhill.
- 11 C - Research the irrigation needs of the crop you plan to grow and only irrigate for that duration.

References:

- <http://srwqis.tamu.edu/media/659/water-wisdom.pdf>
- http://www.epa.gov/WaterSense/text_based.html
- <http://www.cslandscapearchitect.com/2012/12/28/12-days-of-quizzes-day-11-irrigation>