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2.500 Desalination and Water Purification

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Name: _____

Water and Sanitation Literacy Quiz

Susan Murcott

2.500 class

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This quiz is mainly multiple choice and should take no more than 10 minutes.

1. What is the Millennium Development Goals for Water and Sanitation?

2. How many people in the world lack “adequate” sanitation?
a. ½ B b. 1.2 B c. 2 B d. 2.6 B e. 3.8 B f. we don’t know

3. Which of the following are included in the definition of “adequate” sanitation?
a. pour flush toilets b. open defecation c. bucket latrines d. shared facilities
e. pit latrine with slab

4. What % of wastewater in the world is released to the environment without treatment?
a. 5% b. 15% c. 25% d. 60% e. 88% f. 95%

5. How much water do we typically consume in the Boston per day on a per capita basis (assuming we include all residential, commercial, agricultural and industrial use)? *[Note: 1 gallon = 3.78 liters. 264 gallons = 1 m³]*
a. 25 gallons b. 50 gallons c. 75 gallons d. 100 gallons e. 150 gallons f. 200 gallons

6. How much water is typically flushed down a conventional toilet versus a low-flow toilet?

Conventional: a. 1 gallon b. 2.2 gallons c. 3.4 gallons d. 4 gallons e. > 4 gallons

Low-Flow: a. ½ gallon b. 1.2 gallons c. 1.8 gallons d. 2 gallons e. 2.2 gallons

7. When you flush a toilet or use water at MIT, wastewater goes through a sewerage network to Deer Island. What is the level of wastewater treatment at the Deer Island Wastewater Treatment Plant?

a. primary b. secondary c. tertiary d. reverse osmosis
e. tertiary + advanced treatment for potable reuse

8. When was the core technology that is used at the Deer Island Wastewater Treatment Plant first invented and installed?

a. 1690 b. 1916 c. 1955 d. 1975 e. 1985 f. 1999

9. How much do we pay per household per year for water and wastewater treatment in Boston?

a. \$565 b. \$635 c. \$790 d. \$990 e. \$1185 f. \$1565

10. What are 3 major principles of “Blue Development” where “Blue Development” is to water/wastewater/watershed systems what “Green Development” is to environmental design generally?

(i)

(ii)

(iii)