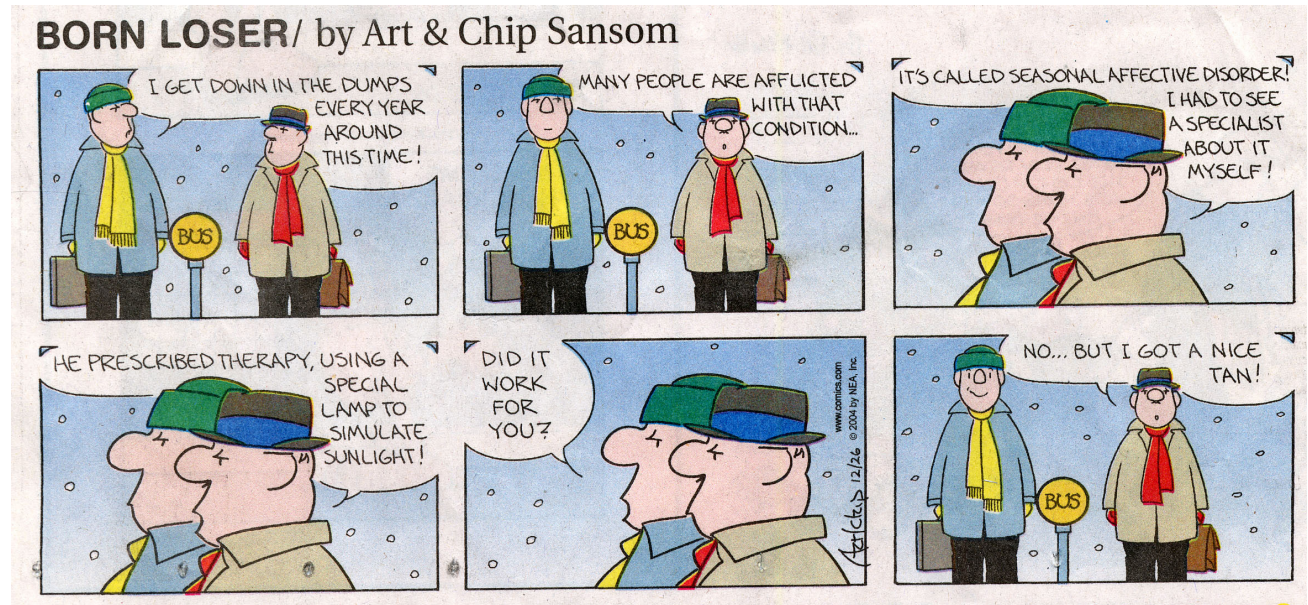


30 Multiple Choice Questions



1. As a rule a lamp with higher efficacy will have
 - A. lower life expectancy
 - B. higher life expectancy
 - C. better color rendering
 - D. poorer color rendering
2. LEDs that have about the same efficacy as CFLs
 - A. are rare
 - B. are operated on AC
 - C. are operated on DC
 - D. none of the above
3. A lamp whose spectral distribution graph shows a few spikes at various wavelengths
 - A. is incandescent
 - B. uses a tri-phosphor coating
 - C. has a poor CRI
 - D. none of the above
4. Light that has a strong relation to good health is
 - A. daylight
 - B. blue light
 - C. full spectrum light
 - D. all of the above

5. If you wanted to calculate the ambient lighting from a luminous ceiling you'd use
- the point-source method
 - the line-source method
 - the zonal cavity method
 - none of the above
6. Most of the surface of the earth is under water, yet water is a scarce commodity because
- less than 1% of it is potable
 - most potable water is wasted
 - water rights laws restrict its use
 - all of the above
7. The evapo-transpiration cycle creates pure water
- in the clouds
 - as rainfall
 - both the above
 - none of the above

8. Which of the following is not a problem with water in the western U.S.?
- a large amount of desert
 - ground water extraction
 - ecological concerns
 - all of the above are problems

9. A new home's water use can be reduced by
- installing low-flush toilets
 - reusing gray water
 - taking baths rather than showers
 - all of the above

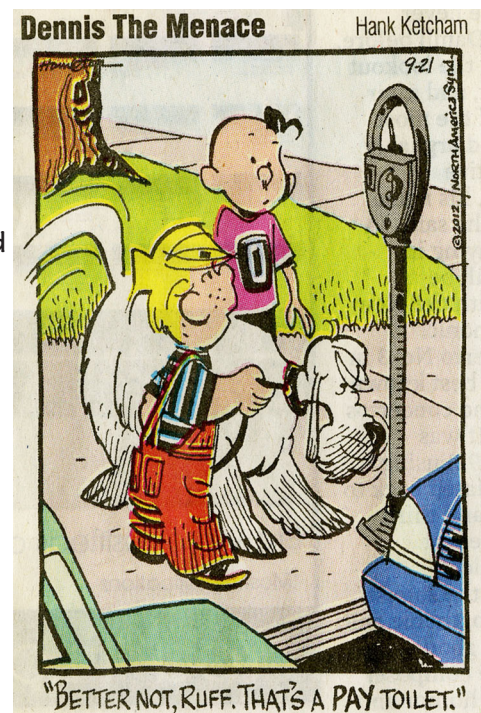
10. Ancient Greek amphitheaters often
- had cisterns beneath the stage
 - used the seating area as catchment
 - used the landform above the seating as catchment
 - all of the above



11. Constructed wetlands are appropriate for waste water treatment at the
- city scale
 - neighborhood scale
 - building scale
 - all of the above

12. A common element in the stormwater strategies at Portland's Water Pollution Control Laboratory and Village Homes is
- a neighborhood scale retention pond
 - swales for capturing stormwater
 - constructed wetlands
 - all of the above

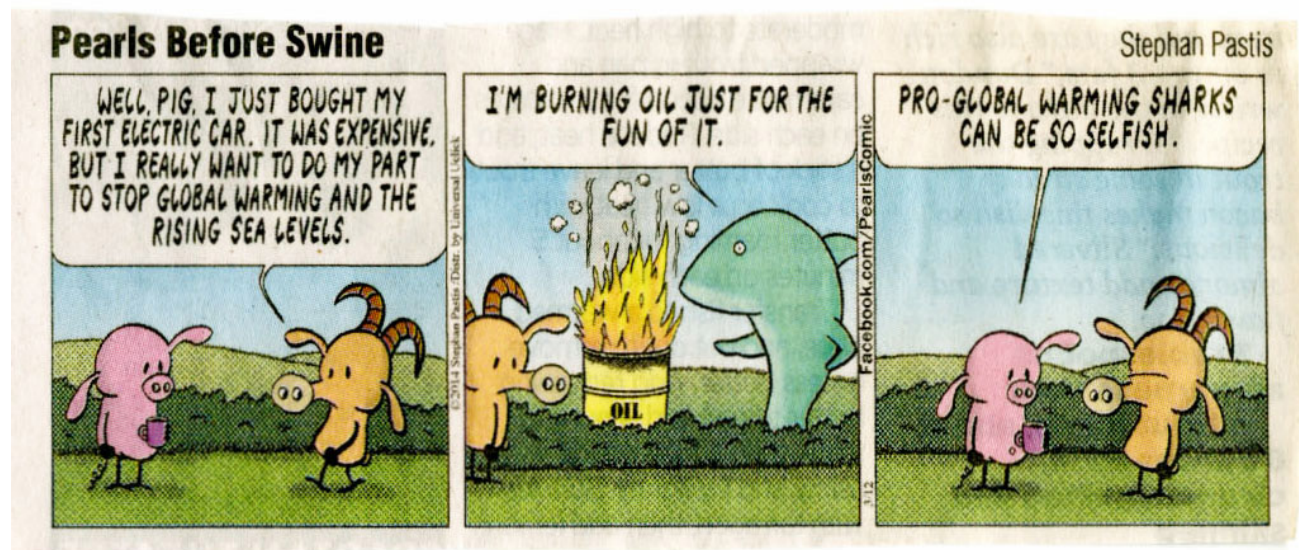
13. Green roofs help manage stormwater by
- retaining much of the stormwater on the roof
 - providing habitat for wildlife
 - mitigating the urban heat island effect
 - all of the above
14. Constructed wetlands and living machines are effective in treating waste water because
- plants require water
 - chlorophyll absorbs pollutants
 - it is nutrient rich
 - all of the above
15. The Center for Regenerative Studies' series of ponds treats waste water with
- duck weed and cattails
 - tilapia
 - water hyacinth
 - all of the above
16. Communal toilets are a feature of
- modern streetscapes in Paris and London
 - Cuzco, Peru
 - ancient Greece
 - Copenhagen
17. Toilets that use less water than the plumbing code mandates are classified
- ultra low-flush (ULF)
 - high efficiency (HET)
 - incinerating
 - all of the above
18. Low-tech composting toilets require
- a vent stack
 - added organic material
 - basement space for the compost chamber
 - all of the above
19. In the U.S. the solid waste recycling rate dramatically increased in
- 1960
 - 1986
 - 2001
 - 2009
20. Proactive management of construction sites can
- divert up to 95% of construction wastes from landfill
 - control stormwater run-off
 - earn LEED and Living Building Challenge credits
 - all of the above





21. Over 95% of municipal solid waste is recycled or incinerated in
- the U.S.
 - the U.K.
 - Germany
 - Bulgaria
22. Which sector of the U.S. economy is responsible for the greatest amount of CO₂ emissions?
- buildings
 - transportation
 - industry
 - sports and entertainment
23. The most ecologically beneficial new building is designed to
- be LEED Platinum
 - meet the Living Building Challenge
 - be regenerative
 - any of the above
24. The European Union requires public buildings to
- pay a tax for carbon emissions
 - exceed the EU energy code
 - publicly display their energy performance data
 - all of the above
25. The largest savings generated by a green building is in
- worker productivity
 - first costs and operational costs of the building
 - energy savings
 - government and utility incentives

26. First Law Efficiency of total energy use in the U.S. is
- over 60%
 - about 50%
 - less than 40%
 - exactly 26%
27. Your client's time preference for money is quantified as
- interest rate
 - rate of inflation
 - discount rate
 - all of the above
28. A prominent European building the "breaths" through naturally ventilated gardens is
- the John Hope Gateway at the Royal Botanic Gardens Edinburgh
 - Scottish Parliament
 - London's "Gherkin"
 - the Queen's Building at DeMontfort University
29. On-site energy production with the shortest pay-back time is
- photovoltaics
 - small flow hydro
 - wind turbines
 - solar hot water
30. The Sainsbury's grocery store in North Greenwich, U.K. features sustainable strategies including
- wind turbines
 - daylighted aisles
 - earthtube ventilation
 - all of the above and more



Get ready for Quiz #3!