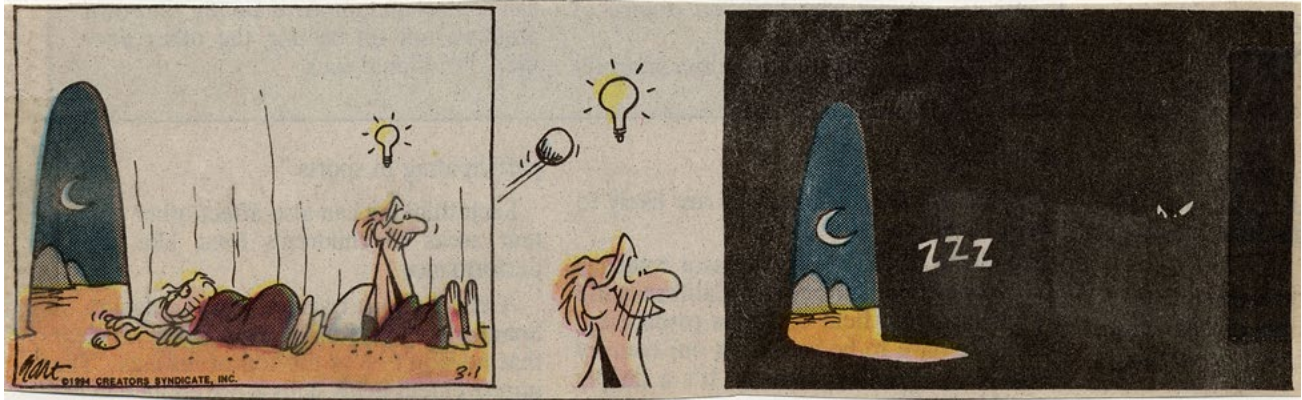


30 Multiple Choice Questions



1. The course textbook featured in a music video is
 - A. Sun Wind and Light
 - B. Mechanical and Electrical Equipment for Buildings
 - C. Heating Cooling and Lighting
 - D. none of the above
2. A daylighted building that takes a bioregional approach features an emphasis on
 - A. beauty
 - B. local sky conditions
 - C. topography and vegetation
 - D. all of the above
3. A repurposed daylighted building fits the category of
 - A. doing more with less
 - B. designing for evolution, flexibility, and adaptability
 - C. using technology that is appropriate
 - D. none of the above
4. A building whose daylighting scheme exemplifies "shape form to guide flow" is
 - A. Botta's San Francisco Museum of Modern Art
 - B. Piano's addition to Atlanta's High Museum
 - C. Gibbs' St. Martin's in the Field in London
 - D. all of the above
5. In daylighting design architects and designers design
 - A. the sources
 - B. the interveners
 - C. the receivers
 - D. the perceivers

6. Maya Lin's polished black granite Viet Nam Memorial is an example of

- A. a specular absorber
- B. a specular reflector
- C. a specular transmitter
- D. a diffuse reflector

7. Weber's Law is closely related to

- A. lighting design
- B. daylighting design
- C. perception
- D. measurement of footcandles

8. Luminance in a room is measured in

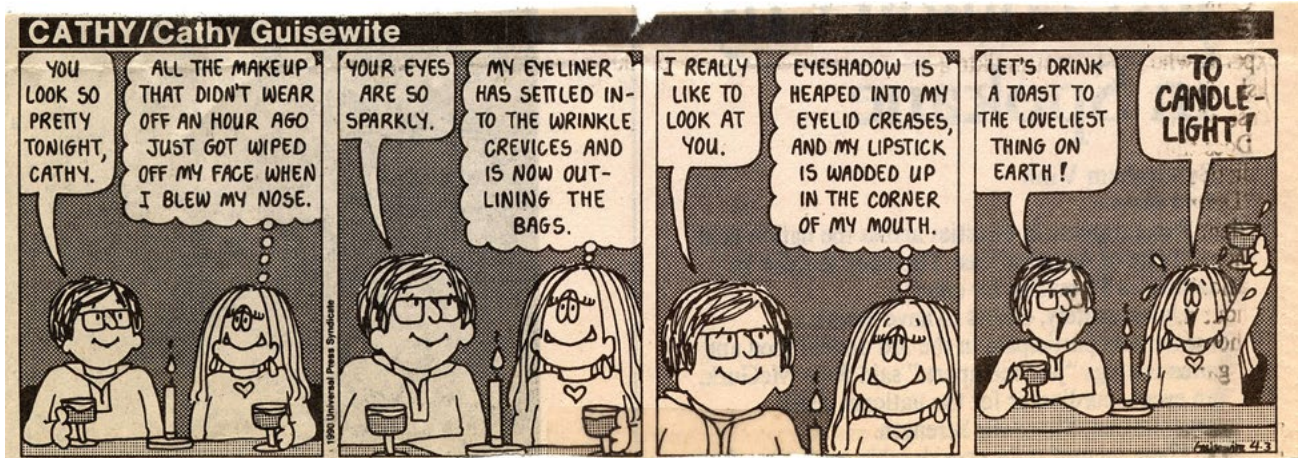
- A. footcandles
- B. foot lamberts
- C. lux
- D. all of the above

9. A worker's desk in an effectively daylighted office will receive light from

- A. the sun component
- B. the floor component
- C. the internally reflected component
- D. none of the above

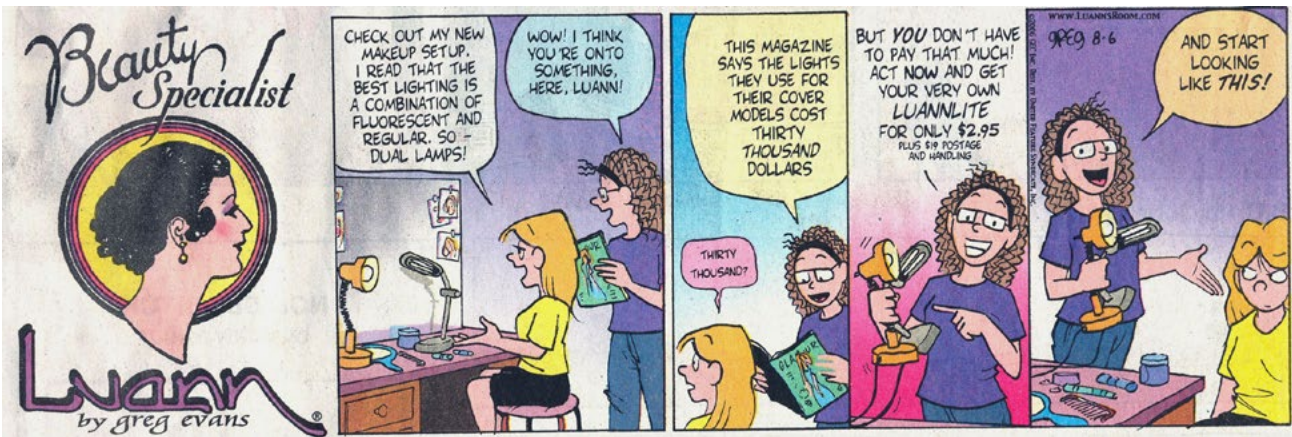
10. A 4 candela light source has a luminous flux of

- A. 4 lumens
- B. 16 lumens
- C. 50 lumens
- D. 64 lumens



11. The best daylighting source for task lighting near a window wall is
- A. a sidelight high in the wall
 - B. a sidelight with its sill at the level of the work plane
 - C. a curtain wall
 - D. all of the above are equally effective
12. Glare in a daylighted space can be mitigated by
- A. apertures in two or more surfaces
 - B. lightshelves
 - C. high IRC
 - D. all of the above
13. Daylight from the sky contrasts in quantity and quality with
- A. electric lighting
 - B. sunlight
 - C. both of the above
 - D. none of the above
14. Lighting design tools include
- A. sketching
 - B. computer models
 - C. physical models
 - D. all of the above
15. One of the major advantages that computer models have over hand calculations for daylighting is
- A. they're more accurate
 - B. they're much easier to use
 - C. they can show daylight distribution in the room
 - D. none of the above
16. Both the GDDM and the BRS Protractors predict daylight
- A. under standard cloudy skies
 - B. for rectilinear rooms only
 - C. under perfectly clear skies
 - D. all of the above
17. Physical daylighting models give reliable results because
- A. light interacts with the model the same way it interacts with a full scale room
 - B. they can allow you to photograph alternative designs for side-by-side comparison
 - C. well-crafted models look like the real full-scale room
 - D. all of the above
18. The daylighted artificial sky in AAS for physical model testing is superior to other artificial skies because
- A. it uses high quality daylight as the light source
 - B. it saves energy
 - C. it exemplifies using passive methods in architectural design
 - D. all of the above

19. Daylight was the primary source of illumination until
- A. the industrial revolution (1850s)
 - B. wide use of the incandescent lamp (1900s)
 - C. wide use of the fluorescent lamp (1930s)
 - D. the invention of the windowless school (1970s)
20. An era when interior illumination levels were not reasonable in terms of light levels and energy use was
- A. the 1930s
 - B. the 1960s
 - C. the 1990s
 - D. all of the above
21. If you installed a new fluorescent lamp today, you'd most likely have to replace it in five years if
- A. you kept it on continuously
 - B. you used it once a day for 10 hours
 - C. you used it once a day for 3 hours
 - D. no chance it would last that long!
22. Electric lighting can be configured to save energy when
- A. energy-efficient lamps are used
 - B. daylight sensors are used to reduce electric lighting as daylight increases
 - C. occupancy sensors turn off lights in unoccupied spaces
 - D. all of the above
23. Incandescent lamps are becoming banned by regulating organizations in the US and EU because
- A. of socialist government policies
 - B. they are extremely inefficient
 - C. they are a century-old technology
 - D. all of the above
24. The efficacy of a lamp describes
- A. its effective color rendering
 - B. light delivery in lumens per watt
 - C. its energy efficiency in lumens per square foot
 - D. none of the above
25. The CRI of fluorescent lamps is most dependent on
- A. color temperature
 - B. efficacy
 - C. the phosphors used in their manufacture
 - D. tube diameter
26. The best LED lamps
- A. mimic traditional incandescent and fluorescent lamps
 - B. redefine the configuration of light sources
 - C. are too expensive for everyday use
 - D. are organic LEDs



27. The type of fixture that uses architectural surfaces to distribute the majority of its light is

- A. indirect
- B. indirect/direct
- C. direct/indirect
- D. direct

28. A unique feature of LED lamps is

- A. superior energy efficiency
- B. programmable RGB color variability
- C. integration with daylighting controls
- D. all of the above

29. The photometric curve graphically shows

- A. the spread of light from a lamp and fixture
- B. the intensity of light related to angle of incidence
- C. all of the above
- D. none of the above

30. Direct fixtures with parolume diffusers

- A. look dark when viewed obliquely
- B. can cause dark corners where wall meets ceiling
- C. are efficient at directing light to a target on the workplane
- D. all of the above