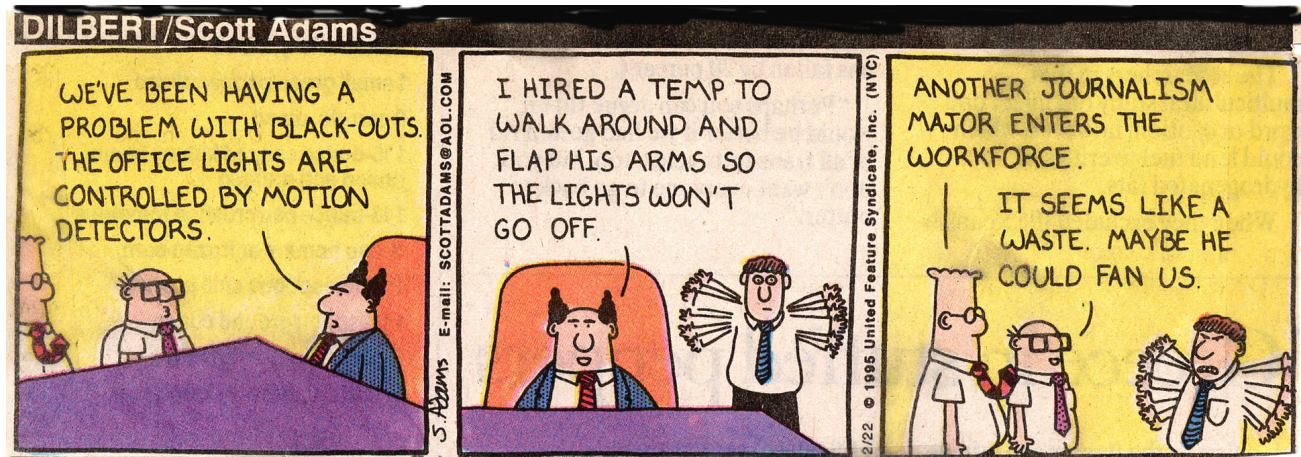
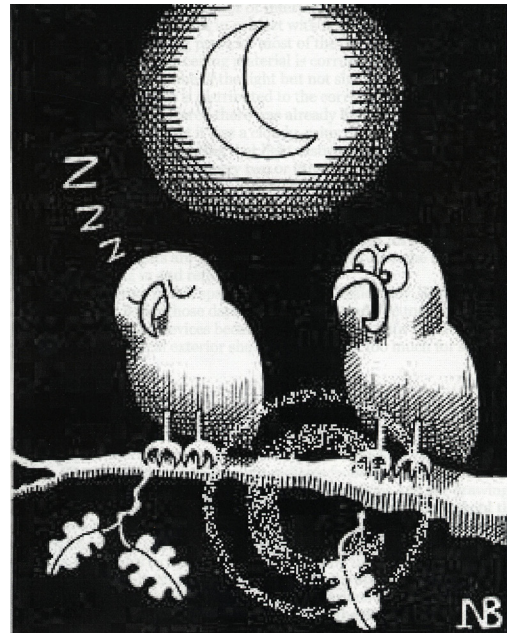


30 Multiple Choice Questions



1. What's "the best text book in the universe"?
 - A. Sun Wind and Light
 - B. The Green Studio Handbook
 - C. MEEB
 - D. all three are equally good
2. Ricardo Legoretta's Managua Cathedral
 - A. is illuminated by toplighting
 - B. uses switchable apertures to respond to environment
 - C. has a beautiful rose window
 - D. all of the above
3. The most effective daylighting in the National Portrait Gallery in Washington, DC,
 - A. is Foster's glass lidded central courtyard
 - B. are the toplighted galleries on the upper floor
 - C. executive offices adjacent to the courtyard
 - D. all of the above
4. Frank Lloyd Wright's living room ceiling at Taliesin West is an example of a
 - A. diffuse transmitter
 - B. specular transmitter
 - C. diffuse reflector
 - D. specular reflector
5. Palladio's Canova Museum appears brighter than Union Station St. Louis because
 - A. it has a larger skylight
 - B. it's a smaller space
 - C. it has a higher IRC
 - D. it is more specularly reflective

6. Weber's Law implies that our response to environmental stimuli is
- A. qualitative
 - B. perceived on a logarithmic scale
 - C. rational
 - D. quantitative
7. If you knew the luminous flux of the light sources in a room, you'd know
- A. the number of lumens
 - B. the room's brightness
 - C. the number of footlamberts
 - D. all of the above
8. For a perfectly cloudy sky
- A. the daylight factor is constant
 - B. the brightness is constant throughout the day
 - C. the distribution of light is a constant 3:1 from zenith to horizon
 - D. all of the above
9. Two rooms of the same size with a 5000 lumen light source have reflective surfaces of 60% (room A) and 20% (room B), therefore Room A is
- A. twice as bright as room B
 - B. four times as bright as room B
 - C. six times as bright as room B
 - D. sixteen as bright as room B
10. Successfully daylighted classrooms with north- or south-facing apertures
- A. depend on effective shading devices
 - B. require horizontal overhangs
 - C. must use clerestory windows
 - D. none of the above
11. Early twentieth century high-rise office buildings featured exterior atriums or courtyards so that
- A. every office could be top lighted
 - B. work spaces were near windows
 - C. circulation space could be daylighted
 - D. all of the above
12. AAS third floor studios could be most cost-effectively daylighted by
- A. a skylight that is exactly 25% of the studio floor area
 - B. a skylight that is much less than 25% of the studio floor area
 - C. a Foster-esque glass lid ala the British Museum
 - D. a grid of SolaTubes placed 5 feet on center

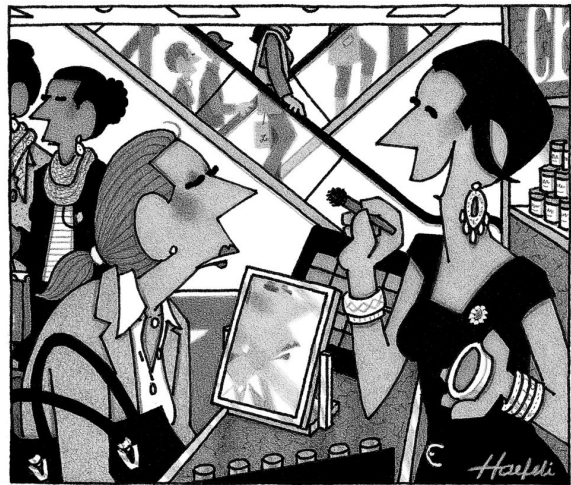


YOU'VE BEEN DAYLIGHTING, HAVEN'T YOU?

13. Glare in a room is best mitigated by
- high internal reflected component
 - apertures in two or more surfaces
 - splayed openings and ceilings
 - all of the above
14. Lightshelves
- throw more light deep into a space
 - increase the total light in a room
 - reduce the contrast between locations near and far from the window
 - all of the above
15. Both hand- and computer-based daylight prediction methods
- evolved from numeric calculations to graphic representation of light in space
 - are meticulously accurate
 - work best for rectilinear rooms
 - all of the above
16. AGi-32 is a more useful computer-based method for predicting daylighting than Sefaira
- because it is simpler to use
 - because it calculates energy use as well as daylight
 - because it can integrate electric light into the visualizations of light in space
 - all of the above
17. The actual sky is not great for testing daylight models because
- it varies in brightness rapidly
 - perfectly cloudy days are rare
 - perfectly clear days are rare
 - all of the above
18. Testing a daylight model outdoors on a sunny day
- gives you the optimum daylight distribution in the space
 - allows you to detect light leaks in your model
 - both of the above
 - none of the above
19. Of the three ways of sensing daylight in a model, which gives the most compelling results?
- visual assessment
 - illuminance meters to calculate daylight factor distribution
 - photography of design options
 - all of the above
20. The Broad Museum's upper floor daylighting scheme
- renders the space practically uniformly illuminated
 - excludes direct sun penetration
 - follows age old adages for mitigating glare
 - all of the above



21. Task lighting illumination levels always reach a point of diminishing returns for accomplishing the task because
- more light is more expensive
 - more light causes glare
 - performance is not linearly related to light levels (Weber's Law)
 - all of the above
22. Blue light in the morning is beneficial because
- it stimulates cortisol secretion
 - it stimulates melatonin secretion
 - it warms the body
 - it depresses alertness
23. Electric lighting schemes that integrate well with our circadian rhythms
- change color temperature over the course of the day
 - promote high productivity
 - promote good sleep habits
 - all of the above
24. The incandescent lamp has been replaced by CFLs and LEDs because
- it is vastly less efficient
 - its color rendering rating is inferior
 - new lamp types are better looking
 - all of the above
25. Since their introduction in the 1930s, fluorescent lamps have been improved by
- becoming more energy efficient
 - using phosphors with better spectral distribution
 - the invention of a suitable incandescent replacement lamp
 - all of the above
26. LED lamps are replacing heavy duty HID's indoors and outdoors because
- LEDs are less expensive
 - LEDs give better color rendering
 - LEDs have higher efficacy
 - all of the above
27. The AAS third floor LED lighting scheme
- reduced glare potential
 - uses direct lighting fixtures
 - uses less energy than the previous scheme
 - all of the above



There! Now all you need is some sympathetic lighting.

28. James Turrell's "Meeting" at MOMA PS1 in NYC is a dramatic example of

- A. direct lighting
- B. direct/indirect lighting
- C. indirect lighting
- D. integration of indirect lighting and daylight

29. The most successfully illuminated space in Diller Scofidio + Renfro's remodel of NYC's Julliard School is

- A. the Gloria Kaufman Dance Studio
- B. the wood-paneled reading room
- C. the box office
- D. none of the above

30. The Lumen method for calculating electric light levels could be termed

- A. a point source method
- B. a line source method
- C. a plane source method
- D. none of the above

