

**Goal** • Answer the following questions to demonstrate your understanding of light.

**What to Do**

- Follow the instructions in each section and answer the questions in this quiz.

**A. Fill in the Blanks**

- Place the correct term from the word list in the blank space in each of the following sentences.

*bioluminescence, chemiluminescence, diffusion, fluorescence, incandescence, phosphorescence, opaque, reflection, refraction, scattering, translucent, transparent*

1. \_\_\_\_\_ material reflects or absorbs all light that hits it.
2. You can see an object clearly through \_\_\_\_\_ material.
3. Some light comes through \_\_\_\_\_ material, but you can't see an image clearly.
4. The change in direction of light when it bounces off a surface is called: \_\_\_\_\_.
5. The change in direction of light as it enters a different substance is called: \_\_\_\_\_.
6. The type of light energy that is stored by certain particles for a period of time is called: \_\_\_\_\_.
7. The type of light produced when a material is heated is called: \_\_\_\_\_.
8. A special type of light produced by living organisms is called: \_\_\_\_\_.

**B. Multiple Choice Questions**

- Circle the correct answer to each question.
9. A unit of electrical energy is
    - (a) watt
    - (b) kilowatt
    - (c) kilowatt-hour
    - (d) hour
  10. The glowing portion of an incandescent bulb is the
    - (a) filament
    - (b) glass
    - (c) socket
    - (d) base

**CHAPTER 7**  
**ASSESSMENT****Quiz****BLM 7-19**

11. Which of these is not found in a fluorescent bulb?
- (a) electrode
  - (b) filament
  - (c) vapour
  - (d) phosphor coating
12. The light energy given off by light sticks comes from
- (a) solar energy
  - (b) electrical energy
  - (c) chemical energy
  - (d) thermal energy
13. A ray of light hitting a surface is called the \_\_\_\_\_ ray.
- (a) incident
  - (b) refracted
  - (c) reflected
  - (d) normal
14. A 60 W light bulb and a 100 watt light bulb differ in
- (a) colour
  - (b) how long they last
  - (c) size of the base
  - (d) intensity of the light they produce
15. A metre stick sitting in a water-filled sink or pencil in a glass of water can look bent at the surface because of
- (a) refraction
  - (b) reflection
  - (c) warping
  - (d) drying

**C. Short Answer Questions**

- On a separate page, write a short answer for each of the following questions.
16. Light reflects off the white surface of a ceiling or wall. Light reflects off a mirror. Why can you see images in a mirror but not in the ceiling or wall?
17. What evidence is there that light travels in straight lines?
18. State the two laws of reflection.
19. Describe the advantages and disadvantages of using an incandescent light bulb vs. a fluorescent tube.