

Name: _____ Date: _____

Chapter 10 Quiz

Part A: Modified True/False

Indicate whether each statement is true or false. If false, change the underlined word or phrase to make the statement true.

- F 1. The Sun is the only natural source of light. most important
- T 2. Incandescence is the process of emitting light because of high temperature.
- F 3. The darkest part of a shadow is the penumbra. Umbra
- F 4. Transparent objects block light. opaque
- T 5. The colours of the rainbow are called the visible spectrum.
- F 6. Blue materials look blue because blue light is absorbed. reflected
- F 7. We see black if all of the visible colours are reflected. white
- F 8. Solar energy is a non-renewable resource. renewable

Part B: Multiple Choice

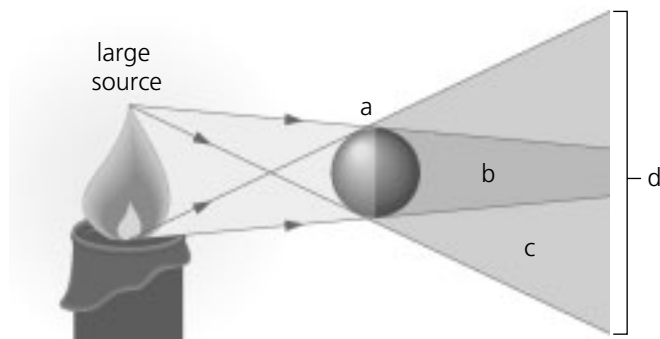
Circle the letter beside the answer that best completes the statement or answers the question.

9. The Moon's light is produced by

- (a) phosphorescence
 (b) chemiluminescence
 (c) reflection
 (d) refraction

10. In the following diagram, which part is the penumbra?

- (a) a
 (b) b
 (c) c
 (d) d



11. Materials that allow some light to pass through are considered to be

- (a) transparent
 (b) translucent
 (c) opaque
 (d) reflective

12. Why are most roofs on Canadian houses made of dark materials?

- (a) Dark roofs absorb more light.
 (b) Dark roofs reflect more light.
 (c) Dark roofs are opaque.
 (d) Dark roofs transmit more light.

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Chapter 10 Quiz (continued)

13. The correct order of the colours of the visible spectrum is

- (a) red, orange, yellow, green blue, violet (c) violet, blue, red, orange, yellow, green
 (b) orange, red, yellow, blue, green, violet (d) red, yellow, orange, green, blue, violet

14. Which of the following is a radiant energy?

- (a) visible light (c) X-rays
 (b) ultraviolet light (d) all of the above

15. How fast does light travel?

- (a) 3 000 km/s (c) 1 000 000 km/s
 (b) 300 000 km/s (d) 1 000 000 000 km/s

Part C: Matching

Match each word with the correct description.

- | | |
|---------------------|-----------------------|
| (a) luminous | (e) fluorescence |
| (b) nonluminous | (f) chemiluminescence |
| (c) incandescence | (g) bioluminescence |
| (d) phosphorescence | |

E 16. process of emitting light while receiving energy from another source, such as a tube of mercury vapourB 17. objects that only reflect lightD 18. process of emitting light for a short time after receiving it from another sourceA 19. objects that emit energy in the form of lightG 20. reaction that emits light from living thingsC 21. process of emitting light because of high temperaturesF 22. process used by glow sticks or light sticks to produce light**Part D: Short Answer**

Use sentences to answer the following questions.

23. How are bioluminescence and chemiluminescence similar? How are they different?

Bioluminescence is caused by a chemical reaction that is similar to chemiluminescence, but chemiluminescence does not only come from living things like bioluminescence does.