

# A LIGHT OF A DIFFERENT COLOR

1. What is the radiation that black lights give off?
2. Why do things look purple in a black light?
3. What are the three categories of UV light?
4. Which one does a black light use?
5. What is a photon?
6. Of the three categories, which is the least harmful to humans? Why?
7. What three skin problems is UVB light responsible for?
8. What is UVC light used for?
9. Why do certain objects appear different when placed under black light?
10. The absorption of UV light and emission as visible light is \_\_\_\_\_.
11. Explain how this occurs in atoms.
12. Why do objects that fluoresce immediately cease to glow when the black light is removed?
13. What lines the inside of a fluorescent lamp?
14. What is the difference between fluorescence and phosphorescence?

15. Why do certain objects "glow in the dark"?
16. Explain the difference between "excited" electrons and those in the "ground state".
17. Explain why Wint-o-Green Lifesavers give off sparks.
18. Why put a \$20 bill under a black light?
19. How does "whiter than white" work?
20. How do eye doctors use a fluorescent solution?
21. How do forensic scientists use black lights?
22. How is Glo Germ used to train medical personnel?