

Use the pages to find the following answers.

- _____ 1. How is light different from the kinds of waves? (p 43)
a) Light does not need a medium to travel b) light requires a medium to travel
- _____ 2. Which of the following is NOT an EM wave? (43-44)
a).radio wave b) infrared wave c) water wave d) X-ray
- _____ 3. What is the entire range of the EM waves called?
a) cosmic spectrum b) Electromagnetic spectrum c) electricmagnets
- _____ 4. How do EM waves differ from eachother?(43)
a) Each EM has a different sound b) Each EM has a different wavelength
c) Each EM is made of different matter d) Each EM has a different weight
- _____ 5. Which of the following is NOT true about Infrared Rays
a) feel heat from a stove burner b) all things give off infrared waves
c) invisible heat is infrared radiation d) Infrared rays are used in heat lamps.
- _____ 6. What is the range of wavelengths of visible light?
a) between 1 nm and 15 nm b) between 400nm and 800 nm c) above 900 nm
- _____ 7. Visible makes up 3% of the entire Electromagnetic Spectrum a) True b) false
- _____ 8. Visible light from sun is white light. White light is visible light of all wavelengths ____.
a) combined b) multiplied c) refracted
(#7 and #8 are not in the book - guess. :)

Match the following:

- _____ 9. Color of the longest wavelength of visible a) violet light
- _____ 10. Color of the shortest wavelength of visible light b) visible spectrum
- _____ 11. Range of colors of light c) red light

12. List 1 good effect and 1 bad effect of ultraviolet light: (P 44)

good: _____ bad: _____

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13. What are 3 things that light can do when it hits an object?

_____. _____.

14. Transparent materials _____ most of the light. An example of a transparent material are s _____ g _____. Go find some shades, go outside. Literally lol
Observation: _____

15. Translucent materials _____ as it passes through.
Examples of translucent materials are _____ and _____

16. An opaque material _____ or _____ all of the light that strikes it. You cannot see through opaque materials because _____. An example of an opaque material are _____.

17. The color of an opaque material is _____.

For example: (explain why an apple is red or an orange is orange)

18. 3 primary colors OF LIGHT are _____

19. 3 secondary colors are OF LIGHT _____

20. Mixing colors of light is different from mixing colors of pigments. As pigments are added together, _____

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Draw figure 11 on bottom of page 53 - face with sunglasses

21. When light bounces off, this is called _____

22. The bending of light is also known as _____

23. State the Law of Reflection:

24. Draw an example of a concave mirror.

25 Draw an example of a convex mirror.

