Name: _____

Date: _____ Grade: _____

SECTION QUIZ 6-2



Remember:
Score an average of 85% or higher on all three quizzes and you may be exempt from the chapter test!



Congratulations! You have completed this section!
Answer the following questions to test your understanding of the material. When you are finished, hand in your quiz to your teacher. Each answer is worth 2.5 points.

Fill in the blank or circle True or False.

1. A magnetic field can induce electricity by causing the magnetic field to expand and contract, by moving the magnet around the wire, and by: _____.
   (a) being exposed to extreme heat
   (b) being hit repeatedly with a hammer
   (c) moving the wire around the magnet
   (d) being chilled to less than 0° Celsius
2. An electric motor converts electricity into _____ motion.
3. An electric _____ converts mechanical motion into electricity.
4. A hydroelectric plant converts the gravitational potential energy of water into: _____.
   (a) electricity (c) magnetic resonance
   (b) gravitational lines of force (d) steam
5. _____ are used to step up or step down voltage.
6. High voltage in a wire: _____.
   (a) causes the generation of frost (c) reduces sparks
   (b) increases the risk of electrocution (d) reduces noise
7. Power is equal to the product of voltage and _____.
8. Increasing current in a wire: _____.
   (a) causes the wire to emit ultraviolet light
   (b) changes the voltage
   (c) increases the loss of energy by heat
   (d) makes electrons run faster
9. Electric and magnetic fields give rise to _____ waves.
10. Visible light is a small part of the _____ spectrum.
11. A tanning bed radiates the body with: _____.
    (a) infrared light (b) microwaves (c) ultraviolet light (d) magnetism
12. Ultraviolet rays travel faster than other light waves in a vacuum.
    (a) True or (b) False

13. A person's body heat is detected as _____ light.

14. White light is a combination of any two primary colors.
    (a) True or (b) False

15. A source of light that contains all of the colors found in sunlight is said to be _____ for daylight.

16. When red, green and blue are combined in equal amounts, the eye sees the resulting color as: _____.
    (a) black (b) ultraviolet (c) white (d) cyan

17. _____ is a combination of the light that enters the eye, the rods and cones that receive the light, and the brain that processes the signal.

18. The color receptors that see in black and white in dim light are: _____.
    (a) cones (b) rods (c) cuticles (d) retina

19. If the brain receives signals from both red and green rods, the color is interpreted to be yellow.
    (a) True or (b) False

20. Two colors that can produce white are _____ colors.
    (a) complementary (b) physical (c) supplemental (d) subtracted

21. A sheet of paper that absorbs all of the colors appears _____.

22. The one that uses the principles of subtractive color is a(n): _____.
    (a) artist
    (b) stage lighting director
    (c) math teacher
    (d) additive color

23. Geometric optics explains the observations of: _____.
    (a) color vision
    (b) interference and diffraction
    (c) reflection and refraction
    (d) rectangles

24. A point source of light: _____.
    (a) allows light to expand freely in all directions
    (b) focuses rays of light in one particular direction
    (c) is an automobile headlight
    (d) is where the light starts

25. The Inverse Square Law for the intensity of light states that: _____.
    (a) diffuse reflection causes parallel rays to reflect in only one direction
    (b) the angle of incidence equals the angle of reflection. The incident ray, the normal ray and the reflected ray all lie in the same plane
    (c) while reflecting the best light, we see ourselves most clearly
    (d) the intensity of light is inversely proportional to the square of the difference from the light source

26. A substance that lets light pass through unhindered is _____.

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27. An _____ medium is one that light cannot penetrate.

28. Regular reflection is when rays are reflected in the same order as they arrive.
    (a) True or (b) False

29. Sometimes magicians use mirrors in performing their tricks.
    (a) True or (b) False

30. The angle a ray makes with the normal after the ray reflects from the mirror is the angle of _____.

31. The Law of Reflection states that: _____.
    (a) diffuse reflection causes parallel rays to reflect in only one direction
    (b) the angle of incidence equals the angle of reflection. The incident ray, the normal ray and the reflected ray all lie in the same plane
    (c) while reflecting the best light, we see ourselves most clearly
    (d) the intensity of light is inversely proportional to the square of the difference from the light source

32. The outer surface of a shiny Christmas tree ornament or some shiny hubcaps is an example of a _____ mirror.

33. A mirror with the curve like the inside of a sphere or bowl has a _____ shape.
    (a) convex (b) concave (c) cone (d) spherical

34. To be at infinity an object must be as far away as the farthest star.
    (a) True or (b) False

35. Most large modern telescopes use _____ mirrors to gather light and bring it to a focus.

36. The Hubbel Space Telescope is located in orbit _____ above the earth.

37. George Bernard Shaw compared life to a *"splendid _____."*

38. *"Genuine _____ is a mark of true greatness."*

39. *"Seeing is not always _____."*

40. *"While _____ the best light, we see ourselves most clearly."*