1. The term "static" means?
   a. Always moving
   b. Not moving
   c. Positive
   d. Neutral

2. What does the "Law of Electric Charges" state:
   a. Like charges repel, and unlike charges attract one another
   b. Like charges attract, and unlike charges repel one another
   c. Like charges do not respond to each other, and unlike charges attract one another
   d. Like charges repel each other, and unlike charges do not respond to each another

3. When an object is charged without touching, it is said to be charged by:
   a. Friction
   b. Contact
   c. Induction
   d. Static

4. The rate at which electric charges flow past a given point in a circuit is called?
   a. electric current
   b. electrical resistance
   c. voltage
   d. electric potential

5. The type of circuit in which each electrical load is wired to the circuit by its own branch circuit is
   a. Series
   b. Parallel
   c. Secondary
   d. primary

6. The "electric potential" in a circuit is also known as the:
   a. Current
   b. Resistance
   c. Circuitry
   d. Voltage

7. What is the charge of an electron?
   a. Positive
   b. Negative
   c. Neutral
   d. Stationary

8. Which of the following measure the electric current in a circuit?
   a. Ammeter
   b. Thermometer
   c. Voltmeter
   d. Ohmmeter

9. What is the term for electricity that does not move?
   a. Static
   b. Current
   c. Kinetic
   d. Ionic

10. A balloon is rubbed on human hair. How will the electrons be transferred?
    a. Balloon to hair
    b. Hair to balloon
    c. Electrons will not move
    d. Back and forth between balloon and hair

11. Positive charges attract _____ charges.
    a. Positive
    b. Negative
    c. Neutral
    d. Both positive and negative

12. Electrons can move the easiest through which of the following materials
    a. Bread
    b. Copper
    c. Hair
    d. Plastic

13. What device measures the electrical energy in a circuit?
    a. Ammeter
    b. Thermometer
    c. Voltmeter
    d. Ohmmeter

14. In a circuit, what is another name for a light bulb?
    a. Source
    b. Load
    c. Control device
    d. Connecting wires

15. A circuit contains three light bulbs in series. Where should a switch be placed to turn all the lights on or off at the same time?
    a. Next to the first light bulb
    b. Next to the second light bulb
    c. Next to third bulb
    d. Anywhere in the circuit

16. Two identical light bulbs are connected in series. How will the brightness of those lights change if another identical bulb is added in series:
    a. Lights will get dimmer
    b. Lights will get brighter
    c. Brightness will not change
    d. One light will brighten the other will dim

17. Using Ohm's law, what is the current drawn from a 12V battery is the circuit contains 5.5 ohms of resistance?
    a. 6.5A
    b. 0.46A
    c. 66A
    d. 2.18A

18. A 2.3A current is drawn from a 24V battery. What is the resistance of the circuit?
    a. 10.4 ohms
    b. 55.2 ohms
    c. 0.095 ohms
    d. 21.7 ohms

19. Using Ohm's law, what is the voltage of a circuit with 2.4ohms of resistance and a current of 4A?
    a. 1.67 volts
    b. 0.6 volts
    c. 9.6 volts
    d. 1.2 volts

20. If one bulb goes out in this type of circuit all the bulbs go out. This circuit is wired in:
    a. Parallel
    b. Series
    c. Branches
    d. Circuit board

21. In a circuit a switch is an example of:
    a. A source
    b. A load
    c. Connecting wires
    d. Control device

22. Two identical light bulbs are connected in parallel. A third identical light is connected in parallel. Theoretically, how will the brightness of the original lights change?
    a. Lights will get dimmer
    b. Lights will get brighter
    c. Brightness will not change
    d. One light will brighten the other will dim

23. Electric potential is measured in:
    a. Amps
    b. Ohms
    c. Voltage
    d. Current

24. Using ohms law, calculate the current in a circuit with 3, 1.5volt batteries and 10 ohms of resistance:
    a. 0.15 A
    b. 6.67 A
    c. 0.45A
    d. 15A

25. A substance that does not allow electrons to pass through it is called a(n):
    a. Conductor
    b. Capacitor
    c. Insulator
    d. Neutral object