

Name_____

Date_____

Electric Current

Directions: Write the term in parentheses that makes each statement true.

1. A negatively charged object has **(more, fewer)** electrons than an object that is neutral.
2. Electrons flow from areas of **(higher, lower)** voltage to areas of (higher, lower) voltage.
3. Voltage difference is measured in **(amperes, volts)**.
4. Electrons passing through a lamp **(gain, lose)** some voltage as they light the lamp.
5. Voltage **(varies, is the same)** in all parts of a series circuit.
6. The current in a circuit is measured in **(volts, amperes)**.
7. Current is almost always the flow of **(electrons, protons)**
8. When a dry cell is connected in a series, the flow of electrons moves from the **(positive, negative)** terminal to the **(positive, negative)** terminal.
9. In a dry cell, the carbon rod releases electrons and becomes the **(positive, negative)** terminal.
10. The voltage difference between the two holes in a wall socket is **(12 volts, 120 volts)**.
11. A car battery is an example of a **(dry, wet)** cell.
12. Resistance is measured in **(ohms, volts)**.
13. Copper has a (higher, lower) resistance to electron flow than tungsten.
14. According to Ohm's law, **($I = V/R$, $V = I/R$)**
15. The symbol for ohm is **(Ω , °)**.

16. In the equation $I = V/R$, I is expressed in **(ohms, amperes)**.
17. In the equation $I = V/R$, V is expressed in **(volts, ohms)**.
18. The **(+, -)** terminal of a dry cell identifies the location of the carbon rod.
19. A wire with a resistance of $3\ \Omega$ has a **(greater, lesser)** resistance to electron flow than a wire with a resistance of $5\ \Omega$.
20. If two copper wires are the same length, but different thicknesses, the **(thinner, thicker)** wire has greater resistance.