

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 ( $\Omega$ ,  $^{\circ}$ ).

**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.