Ohm's Law worksheet

Name_____

1. The rate of electron flow is measured in (a) amperes (b) volts (c) ohms.
2. One amp is one _____ per second. A coulomb is _____ electrons.
3. A _____ is the electric pressure required to produce one ampere of current in a circuit having one _____ of resistance.
4. Electric pressure (E) is measured in _____ (____): the rate of electron flow (____) is measured in amps (_____), the _____ (R) is measured in ohms (_____).
5. In a circuit, voltage and current are (a) directly proportional, (b) inversely proportional, (c) not proportional.
6. According to Ohm's Law, what effect will cutting the resistance have on the current?
7. If the voltage stays the same and the resistance is ¼ of its original, what will happen to the current?
8. Using your equation for Ohm's Law, answer the following. Current equals _____ divided by _____.
9. If the power source is set at 6V and R is 2 ohms, the current =_____
10. V=5volts, R= 10 ohms, I= _____.
11. Voltage = _____ times_____.
12. If the current in the circuit is 7 amps and the resistance is 2 ohms the voltage =_____.
13. R = 30 ohms, I = 3A, V=_____
14. Resistance= _____ divided by _____.
15. If the power source is 12 V and the flow of electrons is 3A, what is the resistance?
16. V= 6V, I= 18A, R=_____