Ohm's Law worksheet   Name_____ Per:____

1. The rate of electron flow is measured in (a) amperes (b) volts (c) ohms.

2. Potential difference is measurement of _____ and is symbolized in the ohms law equation as the letter (__) and the unit symbol (__). The rate of electron flow is called _____ and is measured in amps (A). The symbol for the flow of electrons in an equation is (__).   The _____ (R) is measured in ohms (__).

3. Voltage = _____ times _____.

4. According to Ohm's Law, what effect will decreasing the resistance have on the current?

5. In a circuit, voltage and current are (a) directly proportional, (b) inversely proportional, (c) not proportional.

6. Rearrange Ohm's Law to answer the following; Current equals _____ divided by _____.

7. If the power source is set at 6V and R is 2 ohms, the current =_____

8. V=5volts, R= 10 ohms, I= _____.

9. If the voltage stays the same and the resistance is ¼ of its original, what will happen to the current?

10. If the current in the circuit is 7 amps and the resistance is 2 ohms the voltage =_____.

11. R= 30 ohms, I= 3A, V=_____

12. Resistance = _____ divided by _____.

13. If the power source is 12 V and the flow of electrons is 3A, what is the resistance?

14. V= 6V, I= 18A, R=_____

Extension Questions:

15. A _____ is the electric pressure required to produce one ampere of current in a circuit having one _____ of resistance.

16. One amp is one _____ per second. A coulomb is _____ electrons.