Name: _____ Lab Section: _____ Date: _____

PreLab: Ohm's Law

Instructions: Prepare for this lab activity by answering the questions below. Note that this is a **Pre**Lab. It must be turned in at the start of the lab period. Time cannot be given in lab to perform PreLab activities. After the start of lab activities, PreLabs cannot be accepted. Explain your answers. Points will be taken off if your work is not neat and well organized.

You will need to use Table 1 in the Ohm's Law Experiment.

1. (4 points) In the circuit that you build for this experiment, is the ammeter in series with the "Resistance Wire" or in parallel with the "Resistance Wire"? Is the voltmeter in series or in parallel with the "Resistance Wire"?

2. (6 points) Find the resistance of a 10 meter length of copper wire of 0.4 mm diameter.

3. (5 points) How hot would a copper wire need to be for its resistance to be 10% larger than its value at room temperature (20^{o}C)?