Experiment 4: Resistors in Series and Parallel

Student Name: _____

Section Number: _____

PRELAB

PRE-LAB Instructions:

Print out this page. Feel free to refer to the lab Instructions and other materials, your physics textbook, other students, etc. to help you to ponder, understand, and work out answers to the following question(s). Show your work & answers in the space(s) provided.

PRE-LAB Questions

1) To work on your car at night, you use an extension cord to connect your work light to a power outlet near the door. How would the illumination provided by the light be affected by the length of the extension cord?

2) Describe how you would connect a voltmeter to measure the potential difference across a resistor and an ammeter to measure the current though a resistor.

3) Are the various electrical devices in your house (lamps, appliances, etc.) connected in series or in parallel? How can you tell by using only a voltmeter?