Physics 1102 Experiment 7 Homework

NAME_____

1. How does a conductor differ from an insulator?

2. What is Ohm's law?

3. A 10.0-cm long wire has a diameter of 0.1 mm and a resistivity of 4.0×10^{-7} ohm-cm. Calculate its resistance.

4. A 6.0-volt battery is connected to the resistance in question 3. What current exists in the circuit?

5. What does a "short" circuit mean?

NOTE: You should answer questions 1 and 3 in Experiment 7 in the laboratory manual before you come to the laboratory.