

QUESTIONS TO HAND IN – EXPERIMENT 5

NAME _____

LAB INSTRUCTOR _____ LAB DAY/TIME _____

1. If a 6 volt battery is connected in series with a 1.5 volt flashlight cell, what two possible terminal voltages are available?
2. Suppose that in the circuit of Fig. 5-1, a 6 volt battery is used and the voltage drop across the light bulb is measured to be 4 volts. What must the voltage across the motor be?
3. In the circuit of Fig. 5-3, assume that the current flow through each light bulb is the same. If the current through the battery is 0.1 amp, what is the current in each light bulb?
4. A current of 0.1 amp is measured to flow through one of three identical light bulbs connected in series to a battery. What is the current through the other two bulbs?
5. When a 6 volt battery is connected to a particular type of electric heater element, a current of 0.5 amp flows. How much current must the battery deliver to a parallel combination of two identical heaters?