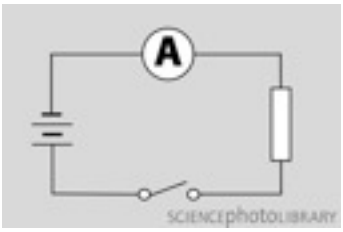
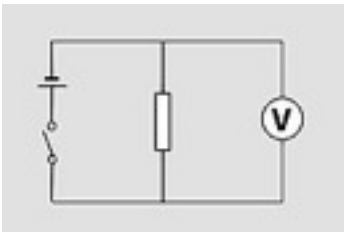
Electric Current

- Electric Current _____
  _____.
- This is measured by an _____.
- The units of measurement are _____, (amps).
- The symbol for current is _____.

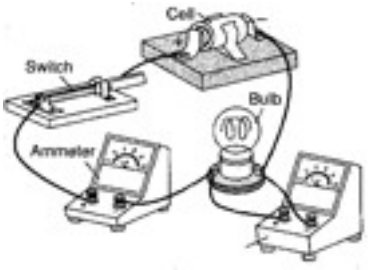


Potential Difference

- Potential Difference _____
  _____.
- This is measured by a _____.
- The units of measurement are _____, (volts).
- The symbol for potential difference is _____.



Draw the schematic circuit diagram for the following



Electric Resistance

- Is the measure _____
  _____.
- The symbol is _____.
- The unit used to measure resistance is the _____ (Ω).
- A material that prevents the transfer of electric charges is an _____ _____.

GRCI Science
SNC1DI

Date: _____

Class Demo Observations:

Part 1: Electrical Loads in a Parallel Circuit

Power Supply Voltage (V)	Voltage drop across bulb (V)	Current (A)

Power Supply Voltage (V)	Voltage drop across first bulb (V)	Voltage drop across second bulb (V)	Current (A)

Power Supply Voltage (V)	Voltage drop across first bulb (V)	Voltage drop across second bulb (V)	Voltage drop across third bulb (V)	Current (A)

Part 2: Electrical Loads in a Series Circuit

Power Supply Voltage (V)	Voltage drop across bulb (V)	Current (A)

Power Supply Voltage (V)	Voltage drop across first bulb (V)	Voltage drop across second bulb (V)	Current (A)

Power Supply Voltage (V)	Voltage drop across first bulb (V)	Voltage drop across second bulb (V)	Voltage drop across third bulb (V)	Current (A)

Discussion Questions: (answer on a separate piece of lined paper using full sentences.)

1. Write a concluding statement about the electric current and voltage in a <u>series</u> circuit as the number of loads increases.

2. Write a concluding statement about the electric current and voltage in a <u>parallel</u> circuit as the number of loads increases.

3. What would happen to the brightness of the bulbs if a 4^{th} bulb was added to the a) series circuit and b) parallel circuit?

4. What would happen to the current flowing through each bulb if a 4^{th} bulb was added in a) series and b) parallel

5. Which would drain a cell more quickly: a) one bulb, b) 2 bulbs in series, c) 2 bulb in parallel?