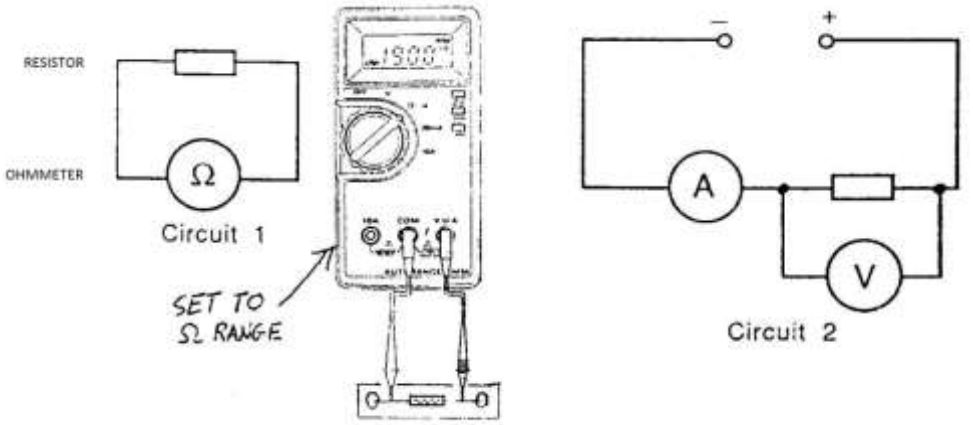
National 5 Assignment
Ohm's Law –Ohmic conductor A

Nat 5

Variation of current with voltage (resistor)

Instructions:

READ THE METHOD BELOW AND MAKE SURE THAT YOU UNDERSTAND IT.



Then:

1. Measure the resistance of the resistor with an ohmmeter.
2. Connect the resistor to the power supply and collect an ammeter and voltmeter in the circuit to measure the current and voltage.
3. Set the power supply to 1 V and read the current and voltage readings from the ammeter and voltmeter respectively.
4. Change the power supply voltage taking current and voltage readings from the ammeter and voltmeter.

Risk Assessment

- Check all the wires and ensure that the wires are not frayed
- The resistor could get hot, so avoid contact with this.
- Switch off the equipment when it is not in use.

Background

1. http://practicalphysics.org/ohms-law.html
2. https://ohm-sheffield.com/
3. http://www.practicalphysics.org/ohms-law-and-resistance.html
4. https://en.wikipedia.org/wiki/Om
5. https://www.bbc.co.uk/education/guides/z8b2pv4/revision
6. https://www.tes.com/teaching-resource/gcse-ohms-law-practical-11067686
7. http://www.bbc.co.uk/schools/gcsebitesize/science/edexcel_pre_2011/electricityintheory/voltagecurrentresistancerev3.shtml
8. http://cdac.olabs.edu.in/?sub=74&brch=9&sim=75&cnt=2
9. http://www.phy.olemiss.edu/lab/genlab/labmanual/2014Manual/OhmsLaw.pdf
10. http://physicsnet.co.uk/gcse-physics/electrical-circuits/
11. Look up any Physics Text book in the class