






Physics - Ohmic and Non-Ohmic conductors

Key word	Definition
Ohmic conductor	A conductor that obeys Ohm's Law
Non-Ohmic Conductor	A conductor that doesn't obey Ohm's Law

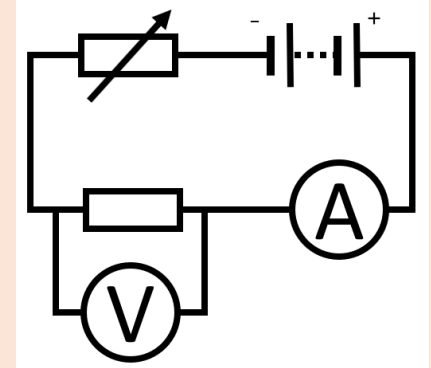
Components:

Component	Picture	What it does?
Resistor		Provides a fixed amount of resistance
Bulb		Lights up when current flows through
Diode		Only allows current to flow in one direction
Thermistor		Resistance depends on light temperature
LDR (light dependent resistor)		Resistance depends on light intensity

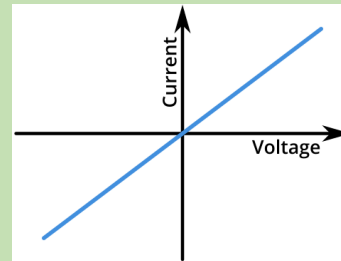
Ohm's Law:

Current is directly proportional to voltage for a fixed value resistor at constant temperature.

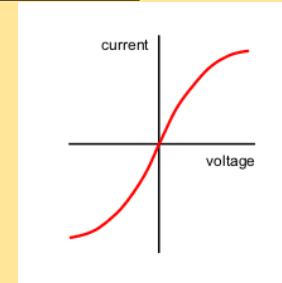
To investigate whether a component obeys ohms law, set up this circuit. Replace the resistor with the component you are investigating.



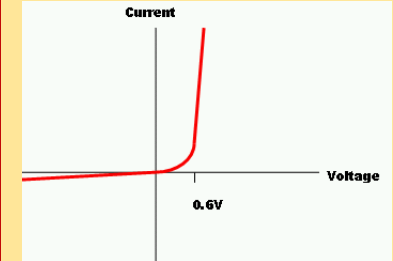
Resistor – Ohmic conductor



Bulb – Non -Ohmic conductor



Diode – Non- Ohmic conductor



Other Components

Thermistor – temperature
 \uparrow , resistance \downarrow

LDR – Light intensity \uparrow ,
 resistance \downarrow

