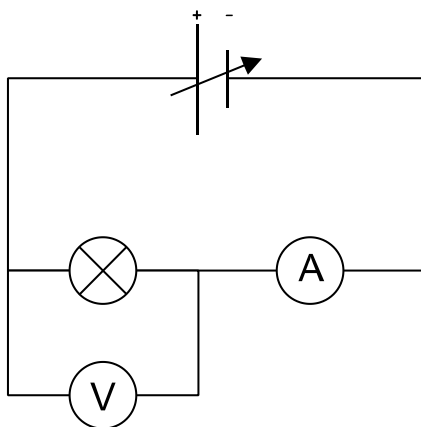


## The resistance of a conductor varies with temperature

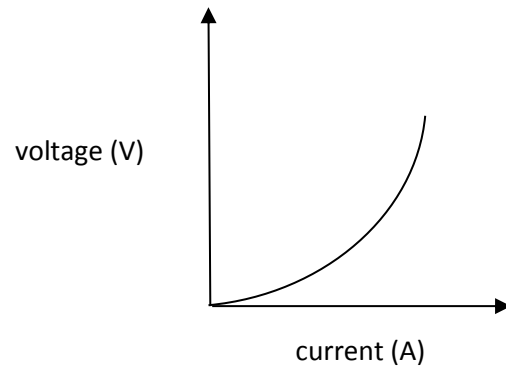
N5

A bulb is an example of a non-ohmic resistor.

This means that as the filament of the bulb is heated by the passage of current through it, its resistance is increased.



Increasing the voltage to the bulb, causes the voltage and current to the bulb to change, as shown in the graph below



- This shows that voltage is not directly proportional to current and therefore does not follow Ohm's Law.
- As the tungsten filament is heated its resistance increases.