

Q2
A student creates a simple circuit containing a battery, a switch and a bulb.
He connects them all in a single, closed loop. Draw the circuit diagram for this circuit.

Topic 2 — Electricity

current = charge / time
 $I = Q/T$
 I = current (A)
 Q = charge
 T = time

Charge moves around a circuit, they form an electric current
 - the flow of charge.
 - current is a flow of charges, usually carried by negative charges which are electrons

eg batteries: supply electrical energy to a circuit
 power supplies: supply electrical energy to a circuit
 voltage

OHM'S LAW

resistance - a measurement of the opposition of charges in a circuit.
 For most materials the resistance depends on:
 - type of material
 - length of material
 - the thickness of the material
 The thinner or longer the material
 As resistance increases the current decreases

electricity

INVESTIGATING

In a series circuit everything is connected end to end

resistor

Bulb

As the voltage increases the current will also increase

A positive linear relationship increases so does the

MEASURING RESISTANCE

dependent resistor (DR)
 Emitting Diode (LED)

What will be used?
 the current will decrease?
 increase the greater what?
 measured in?
 depends on?

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