Chapter 2 Physics electricity

Current and circuit symbols

- Current is flow of electric charges
- electrons moving in a circuit is called current
- Unit of current is ampere
- Formula relation is basically current is equal to flow of charges per second
- In a closed loop current is same at all points

Potential difference

- The driving force that push is the charges around is called potential difference
- Unit of potential difference is volt

Resistance

- Anything that slows down the flow of current is called resistance
- unit of resistance is Ohm
- higher resistance means lower current

When current flows the energy transfer to the lamp the lamp heat and resistance increases

Types of resister

- There are two types of Resister variable resistor and fix resistor
- Lamps can act as a variable resistor because their resistance changes with the current

Investigating the resistance Of the wire

- Method is to build a circuit with ammeter voltmeter ,switch and variable resistor
- Then you have to close the circuit
- Then measure the current with voltmeter and ammeter and calculate the resistance

Voltmeter reads 6.01 and resistor is 4.0 Ohm what is the current is through the ammeter
V=IR
1.5A

Laptop charger passes a current of 8 ampere through the laptop battery
calculate in minutes how long charges need to be connected to the battery for 28800 coulomb charge to be transferred

Q= I x T
T = 3600s

An appliance connected to 230 volt source calculate resistance of plants if the current of 5 ampere is flowing through it
46ohm