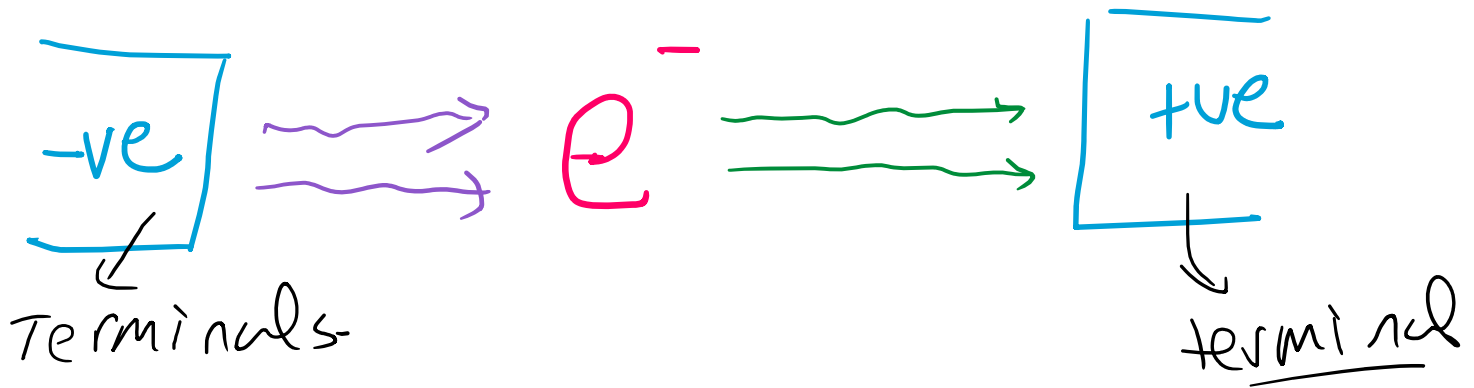


Current
moving negative charges
→ electrons



Electric Current:

Flow of electrons due
to Attraction & repulsion
from $\oplus$ & $\ominus$ terminals

charge is measured in Coulombs
(C)

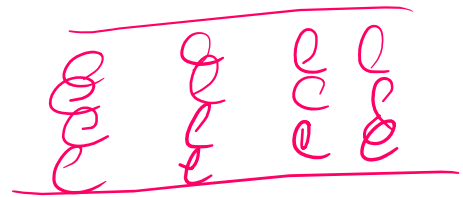
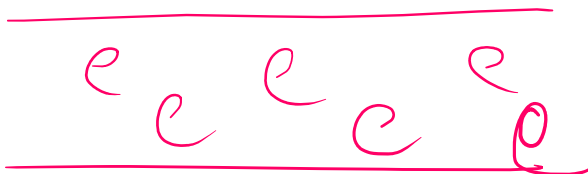
Current is measured in Ampere
Amp
A

current symbol is I

charge symbol is Q

$$I = \frac{Q}{t}$$

Intensity



Example the charge of 1

electron is $1.67 \times 10^{-19} \text{ C}$

If a wire has 2 Amperes of current flowing through it, how many electrons will flow in 30 mins?

$$I = \frac{Q}{t}$$

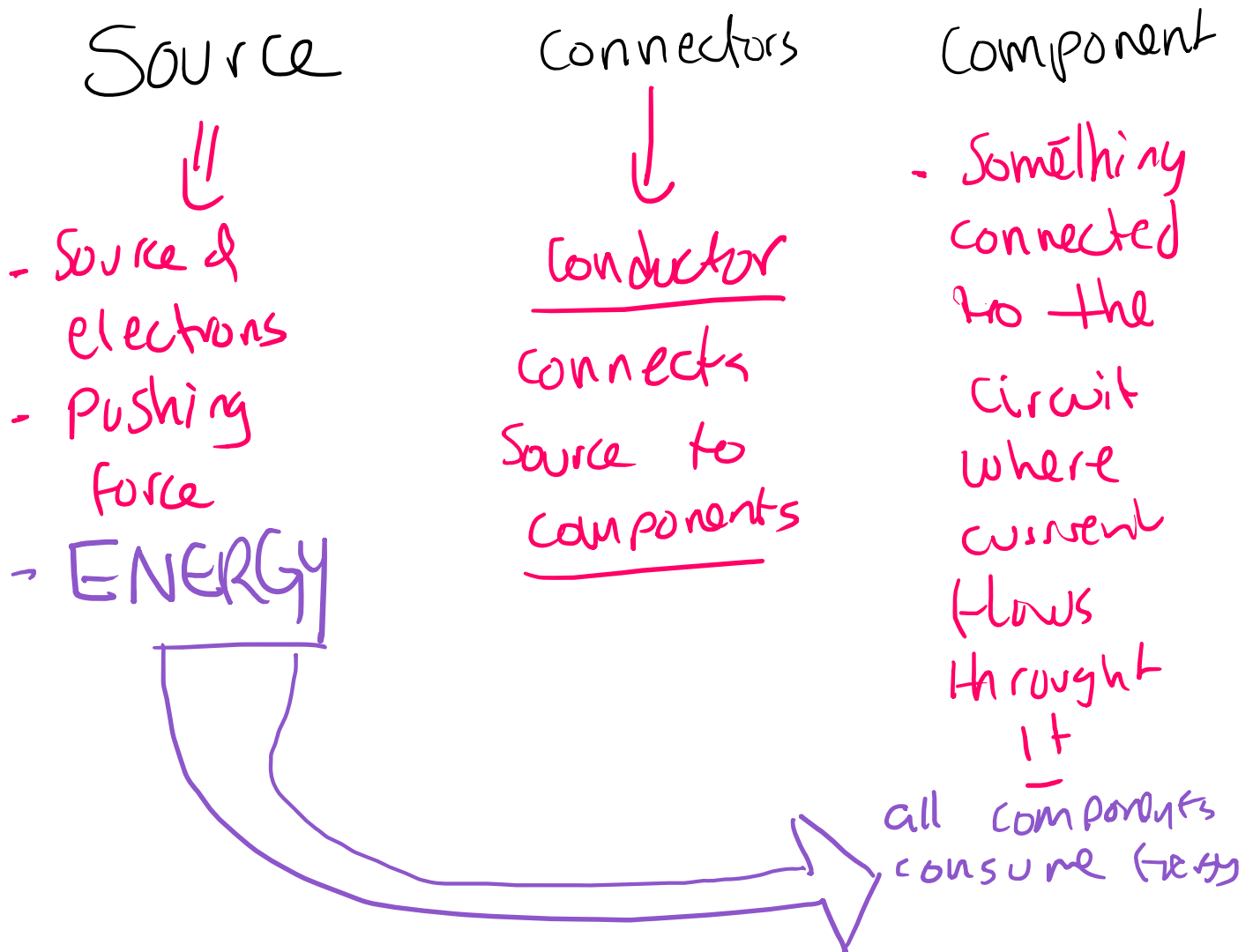
$$2 = \frac{Q}{30 \times 60}$$

$$\begin{aligned} Q &= 2 \times 30 \times 60 \\ &= 3600 \text{ C} \end{aligned}$$

$$\text{no of } e = \frac{3600}{1.67 \times 10^{-19}} = 2.1 \times 10^{22} \text{ electrons}$$

Drawing circuits

circuit has 3 components



Electric Current CARRIES
Energy from Source to components

energy
e

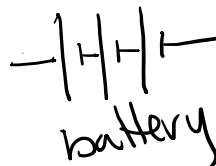
Circuit diagrams

Source

→ battery



cell



battery

→ wall-
Socket



switch (open)
no current off



closed → current on

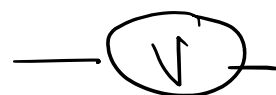


Resistor

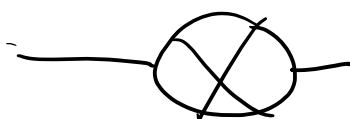


Ampere meter

→ Ammeter
measures
current (Amp)



voltmeter → measures volt



Lamp



Buzzer

