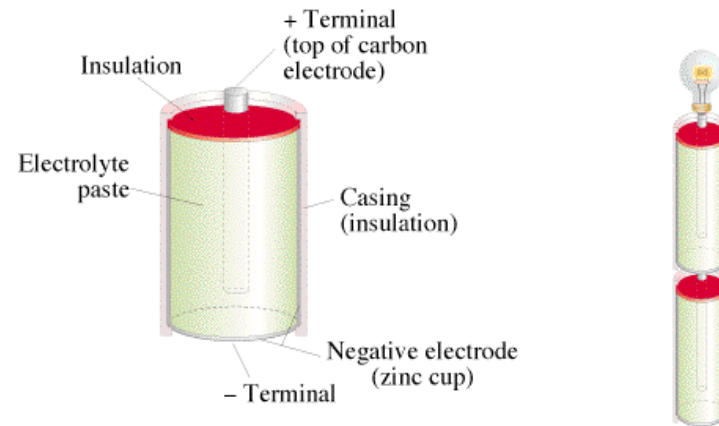
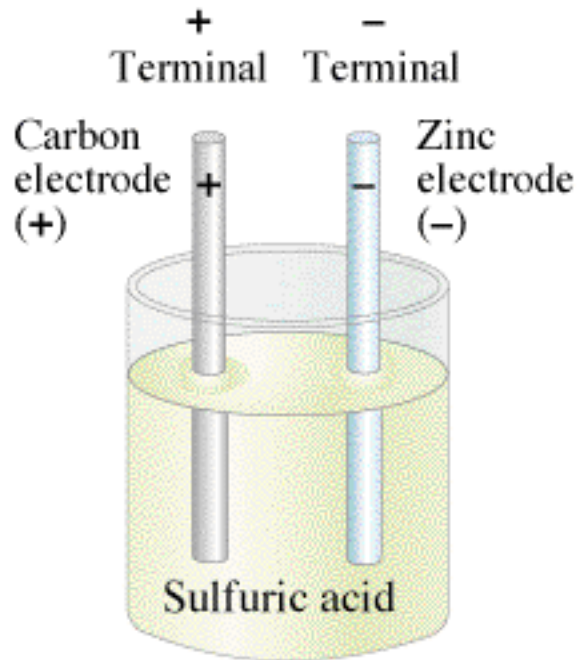


Ch 18. Electric Current

I. Current

Battery: converts other forms of energy into electrical energy
a supply of electric charge



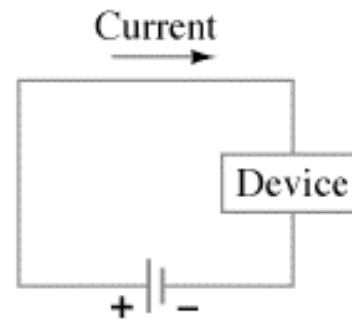
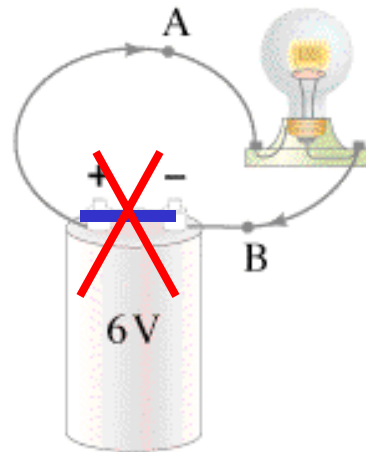
Shorting +/- terminals damages it

Electric Current

Electric current: a continuous flow of charges

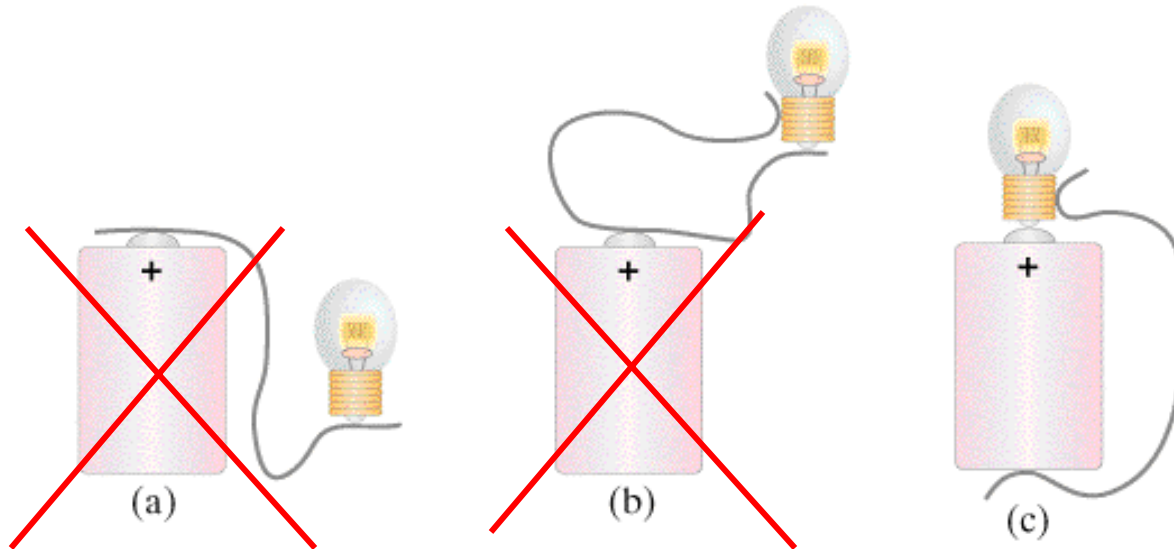
$$I = \Delta Q / \Delta t, \text{ unit: ampere (1A=1C/s)}$$

Electric circuit: continuous conducting path between the battery terminals.



Directly connect + and -: short circuit

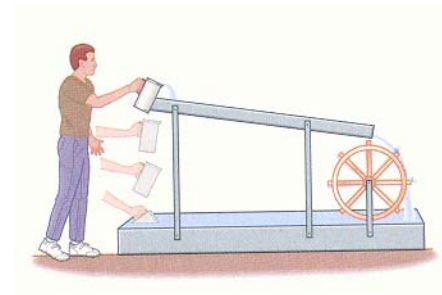
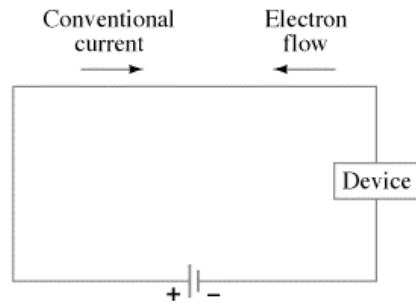
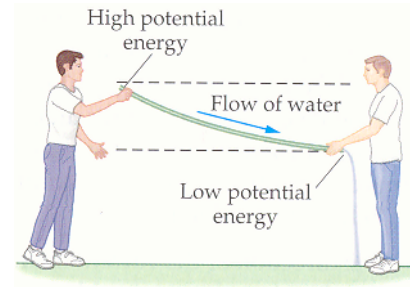
Circuit Examples



Current Direction

Current direction:

High to low voltage
Flow of positive charge
(Conventional current)



Opposite to electron flow