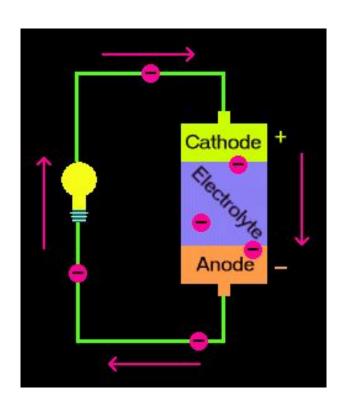
## How do our soda can Charcoal Battery work

or all batteries

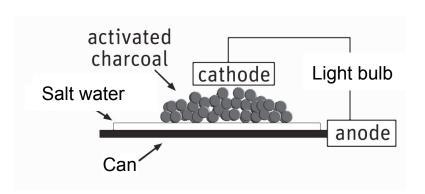
## **Basic Battery**



Batteries needs flow of electrons to work

- Electrons collect at on the negative side (anode)
- Electron want to flow to the positive side (cathode)
- Electrolyte prevents direct path from Anode to Cathode
- Only path left for electrons to flow is through the wires and light bulb.

## How Our Aluminum air battery works



Cathode-oxygen in the air trapped in side charcoal

Anode- Aluminium Can

Electrolyte-Saltwater

## How Our Aluminum Air battery works (Chemistry)

Anode-Reaction-Aluminum can

$$Al(s)+3OH^{-}_{(aq)} \rightarrow Al(OH)_{3(s)}+3e^{-}$$

Cathode-Reaction Oxygen trapped in charcoal

$$O_{2(g)} + 2H_2O_{(I)} + 4e^- \rightarrow 4OH_{(aq)}$$

Overall Reaction

$$4AI(s)+3O_{2(g)}+6H_2O_{(I)} \rightarrow 4AI(OH)_{3(s)}$$