ch.29 Simple chemical cell

2 metals in the same solution
-disadvantage : electrons may not flow through the external circuit
transfer of electron- directly between the electrodes
Half cell:

Salt bridge:
- a strip of filter paper soaked in a solution of electrolyte
- e.g. potassium nitrate (x react with the substance in the cell)
- x hydroxide
- allows ions of the soaked electrolyte – move from one cell to another

Reason we need it:
1. Excessive + / - charge accumulate – electrode
2. E.g. $MgSO_4$(Mg) and $CuSO_4$ (Cu)
- prevent mg ion (dissolve of Mg electrode) from entering the solution
- Prevent more electrons from entering the electrode

Functions:
1. completes the circuit – ions to move from one cell – to another
2. provide ions to balance the charge

Daniell cell
- half cell separated by porous device
- porous device :

1. prevents direct mixing of the electrolyte
2. completed the circuit (by allowing ..)

Electrical neutrality :
(concentration gradient)- negative ions move into the device
- positive ions move out