

- Extraction of Aluminium:-

Ore: Al_2O_3 Bauxite

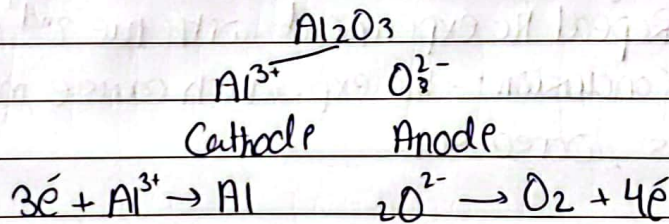
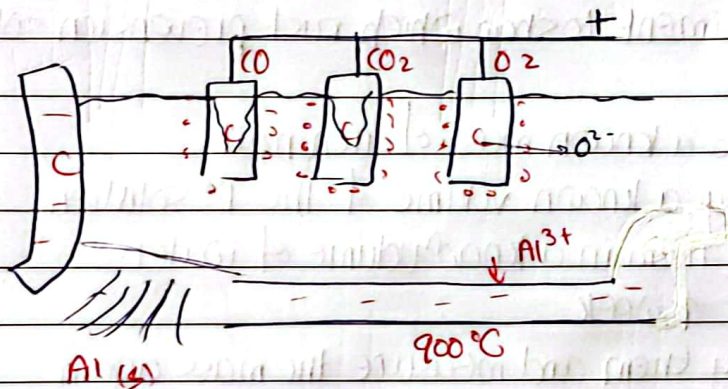
Method: Electrolysis for molten Al_2O_3 / graphite

→ m.p of Al_2O_3 is about 2000°C

→ so we dissolve Al_2O_3 in a molten cryolite Na_3AlF_6

→ (1) to lower m.p to 900°C , so less cost.

→ (2) to increase the electrical conductivity.



* Gases produced at anode:-

- 1- O_2
 - 2- CO_2
 - 3- CO
- } reaction of rods with O_2
so we must replace them periodically.

Property:-

Use:-

- | | |
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| <ol style="list-style-type: none"> 1- low density 2- Ductile 3- Malleable 4- conducts electricity 5- Form an oxide layer which is non-toxic | <ol style="list-style-type: none"> - in aircraft bodies - electrical wires. - window frame / cooking utensils - wires - Food cans. |
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