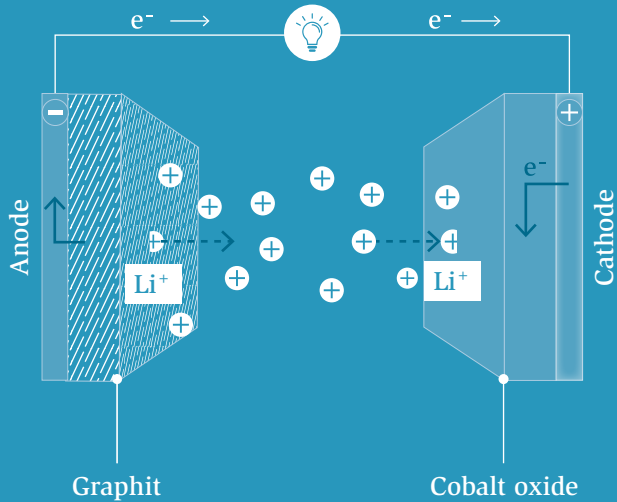
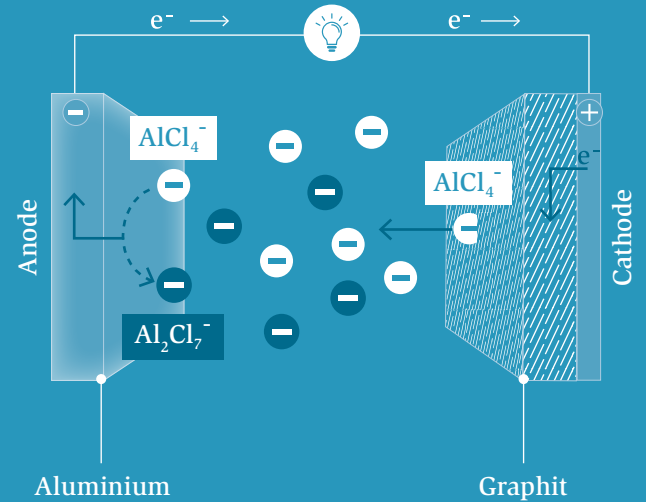


## Lithium-ion battery



When the battery is discharged, lithium ions are released from the graphite anode, flow to the cathode and are deposited as metallic lithium in the cobalt oxide crystal lattice. When charging, the process is reversed (rocking chair principle).

## Aluminium Graphite Battery



During discharging, aluminium chloride ( $\text{AlCl}_4^-$ ) is chemically converted (into  $\text{Al}_2\text{Cl}_7^-$ ) at the anode and at the same time released from the graphite at the cathode. The process is reversed during charging. To be able to fully recharge the battery, sufficient  $\text{AlCl}_4^-$  must be available. This means that a fairly large amount of electrolyte liquid is required. This is why aluminum batteries are about five times heavier than lithium-ion batteries.