

# Realfagskonferansen

Batteridisseksjon

12.05.2020

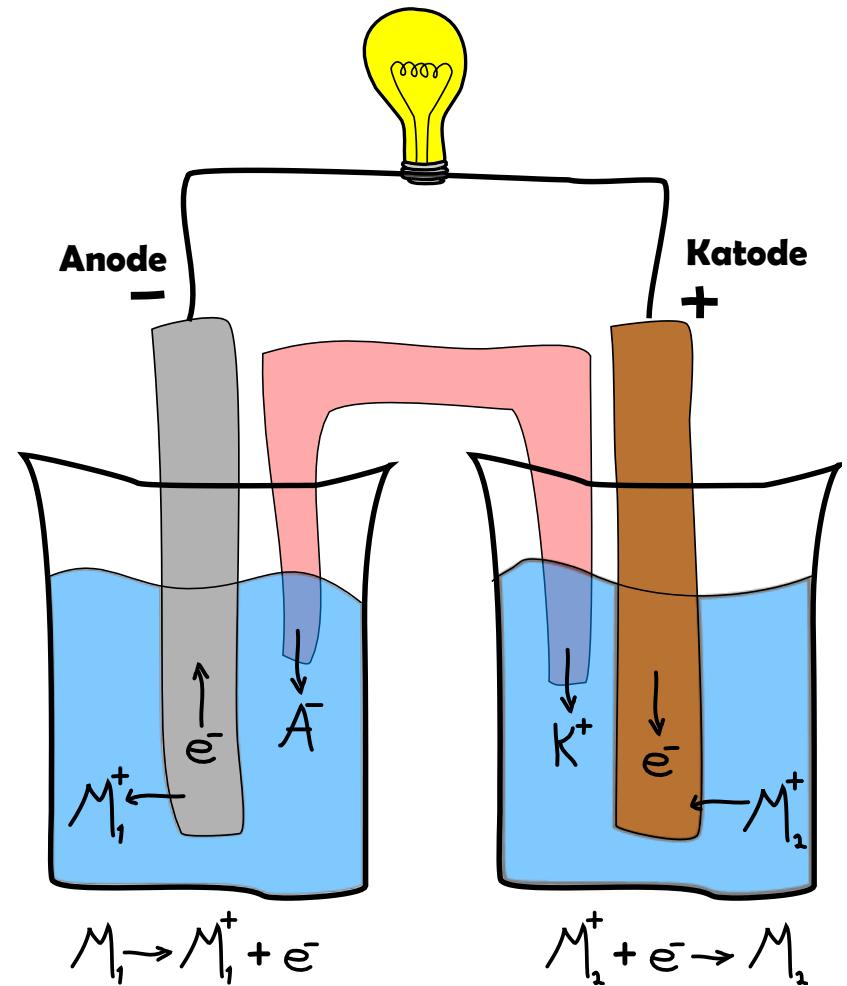
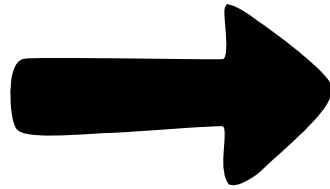
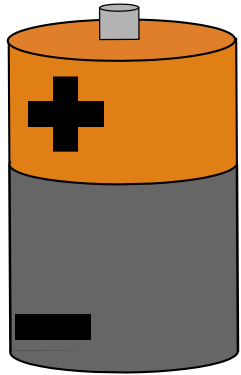
Ann Mari Svensson & Ingeborg Treu Røe

Institutt for materialteknologi, NTNU

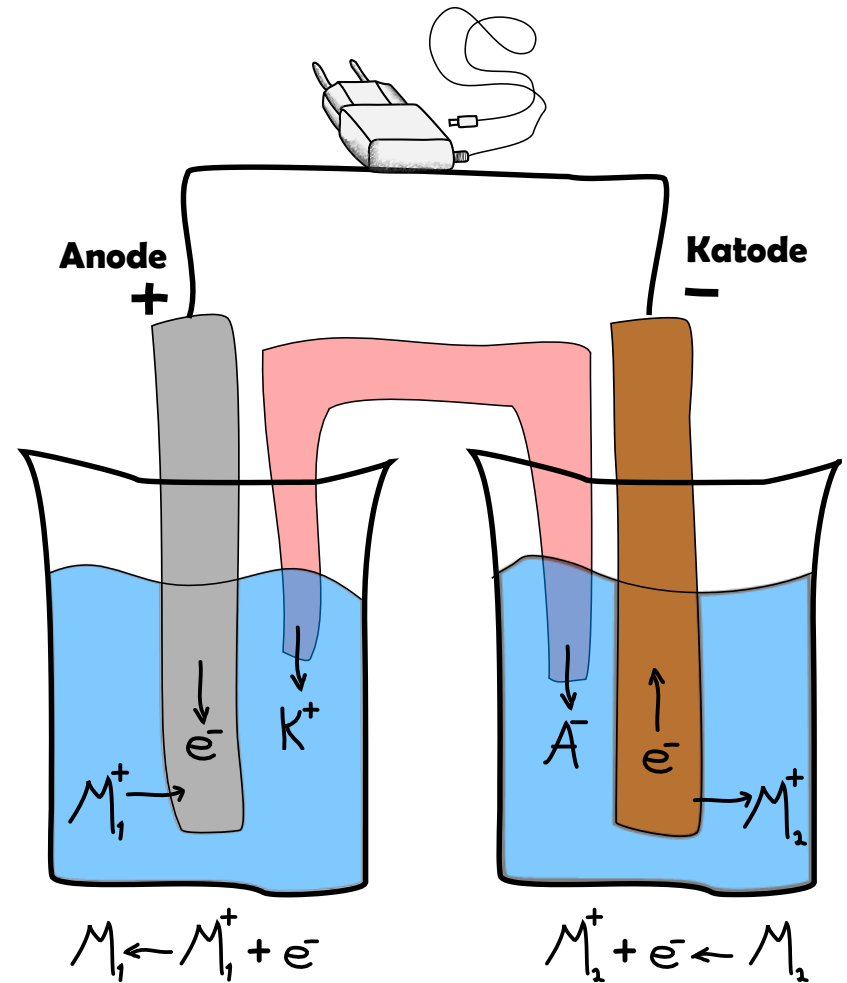
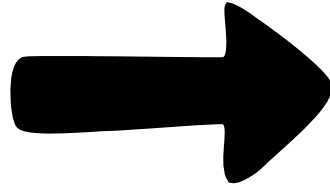
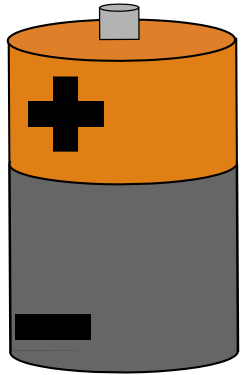
# Øktens plan

- Hvordan batterier fungerer
- En virtuell kikk inni batterier
- Batterier i dag og i fremtiden

# Energilagre

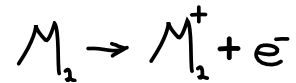
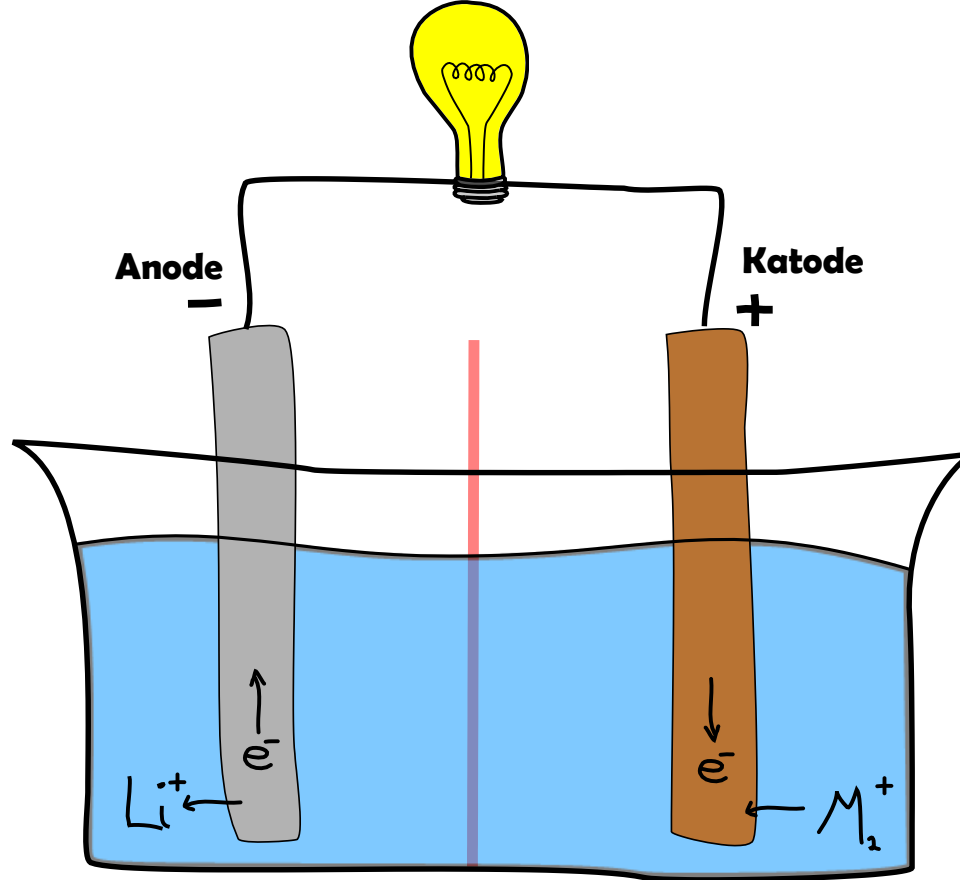
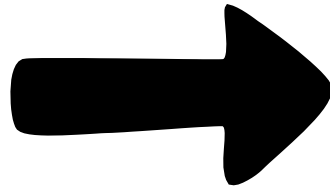
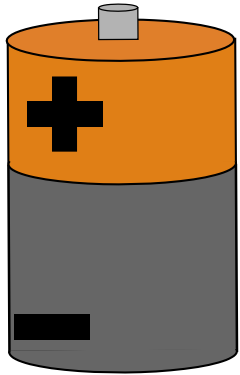


# Energilagre



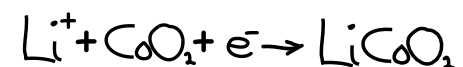
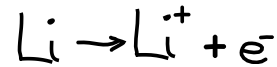
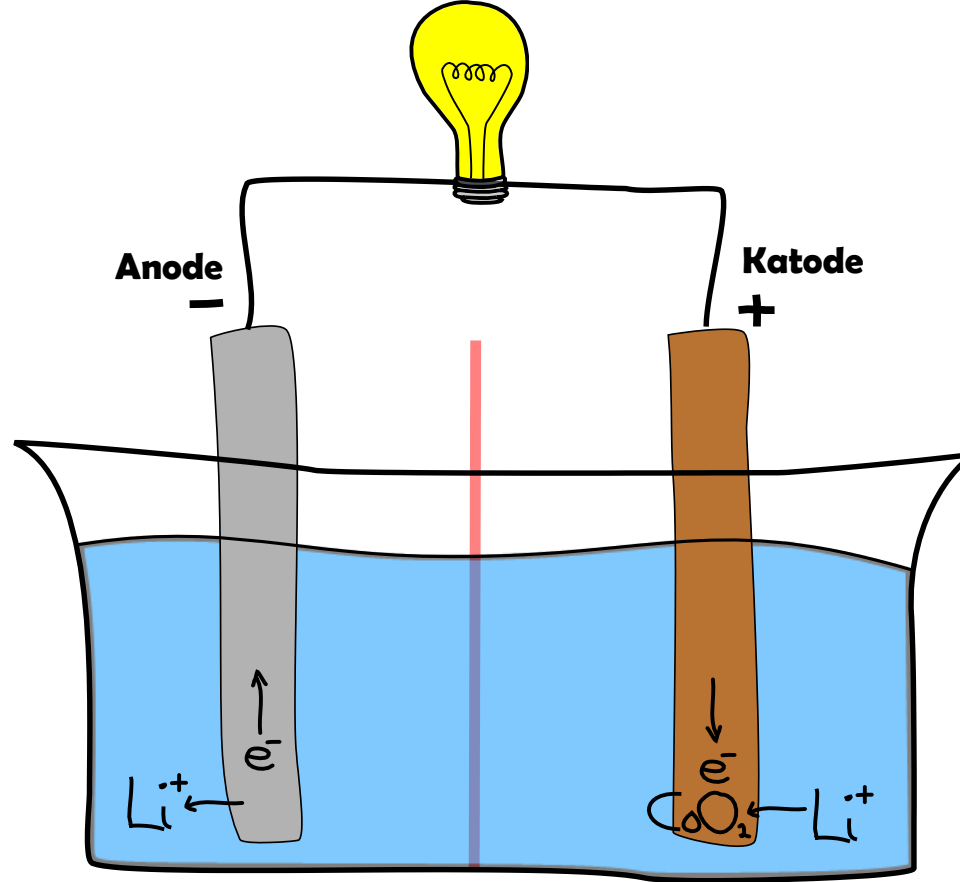
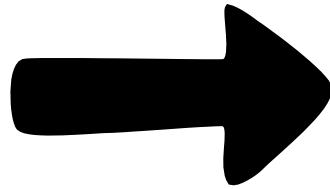
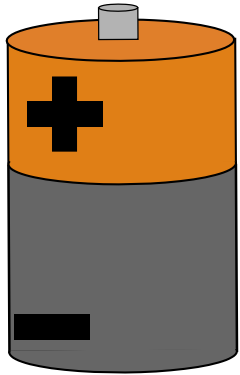
# Energilagre

## Litiumbatterier



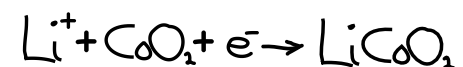
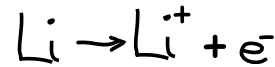
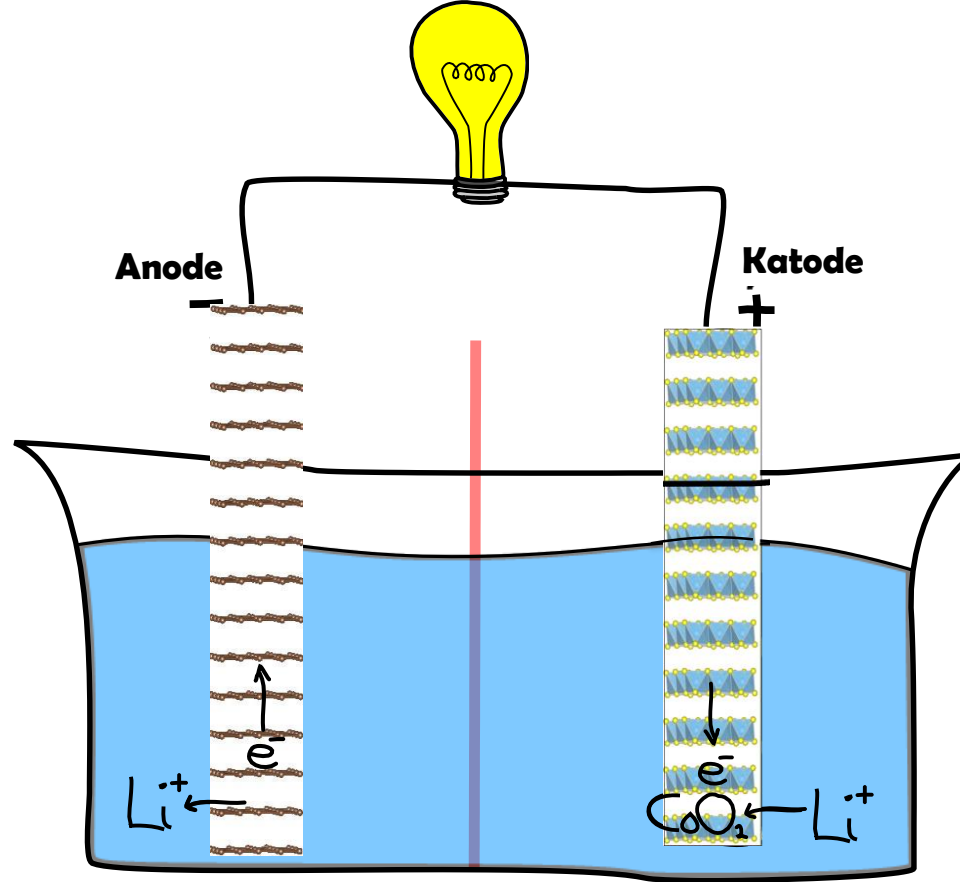
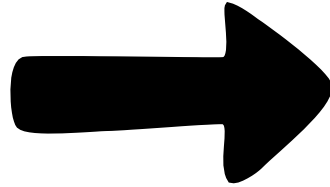
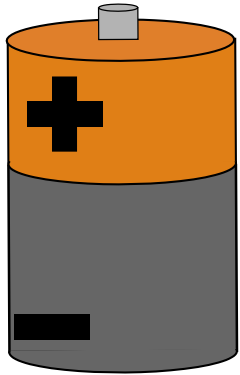
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## Litiumbatterier



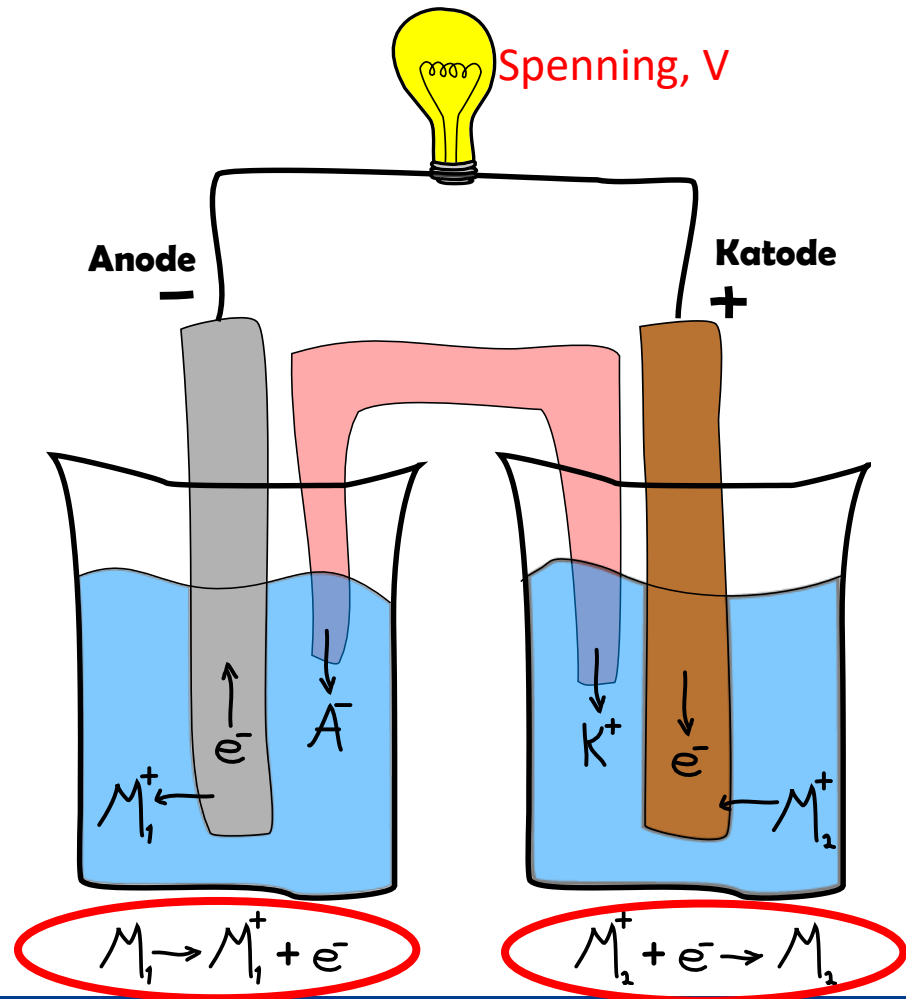
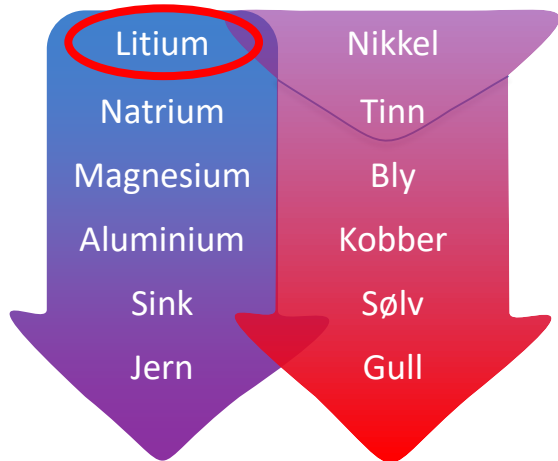
# Energilagre

## Litiumbatterier



# Batteribetegnelser

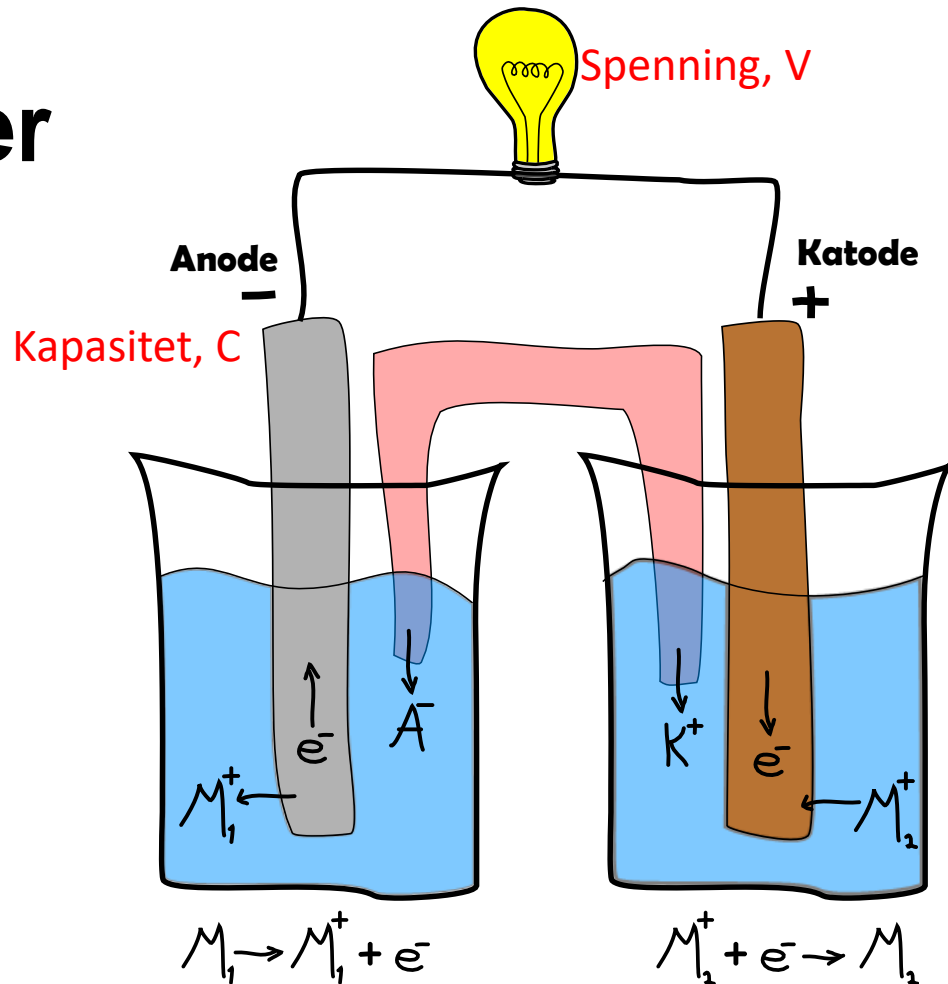
- Spenningsrekka





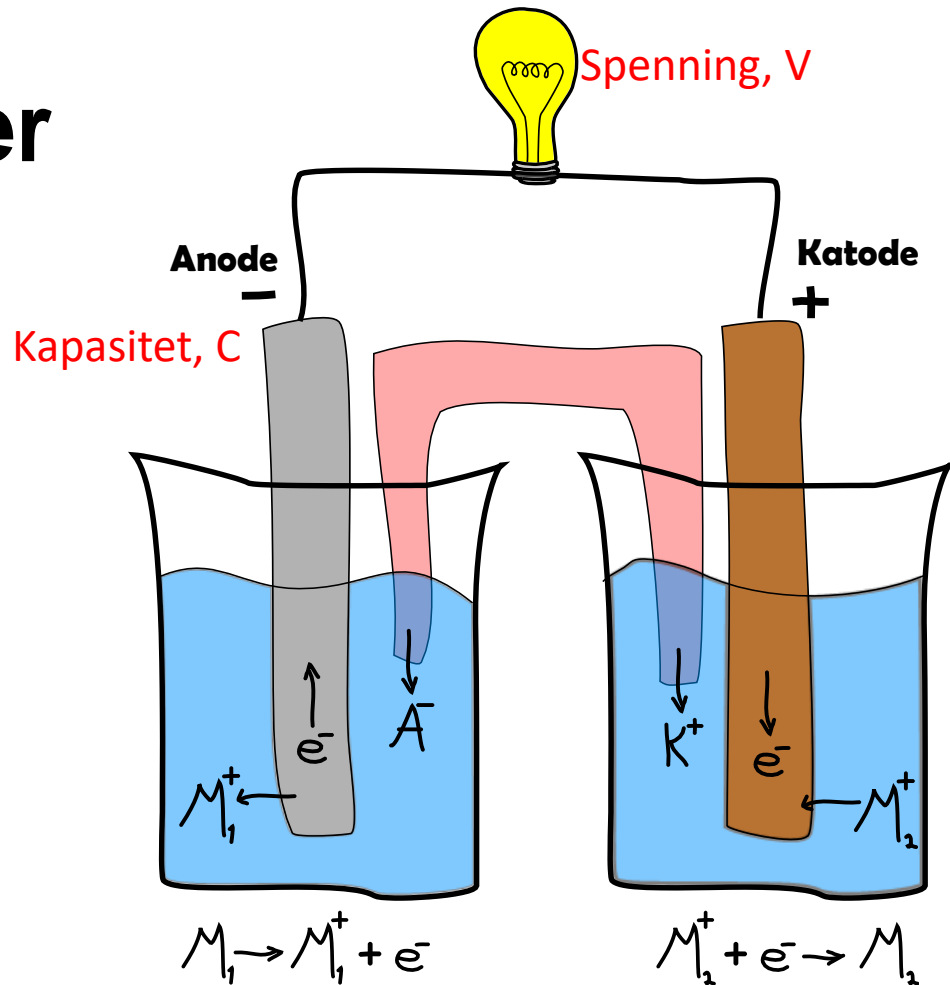
# Batteribetegnelser

- Spenningsrekka
- Kapasitet, C



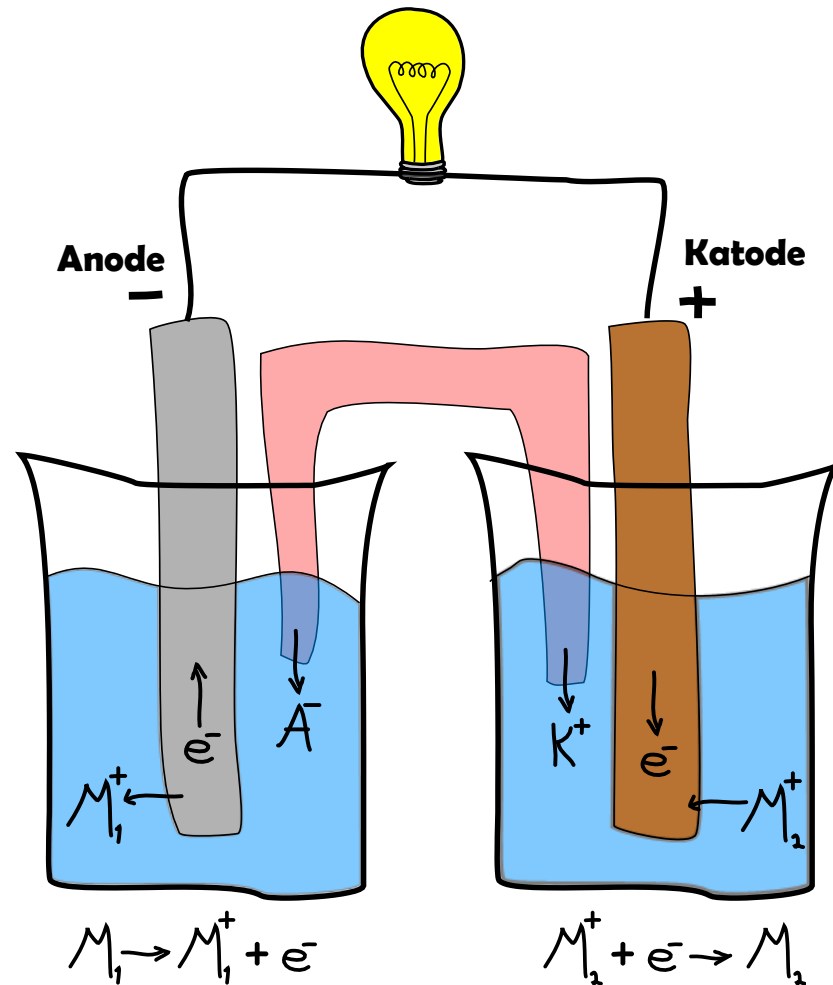
# Batteribetegnelser

- Spenningsrekka
- Kapasitet, C
- Energitetthet:
  - $U = CV$

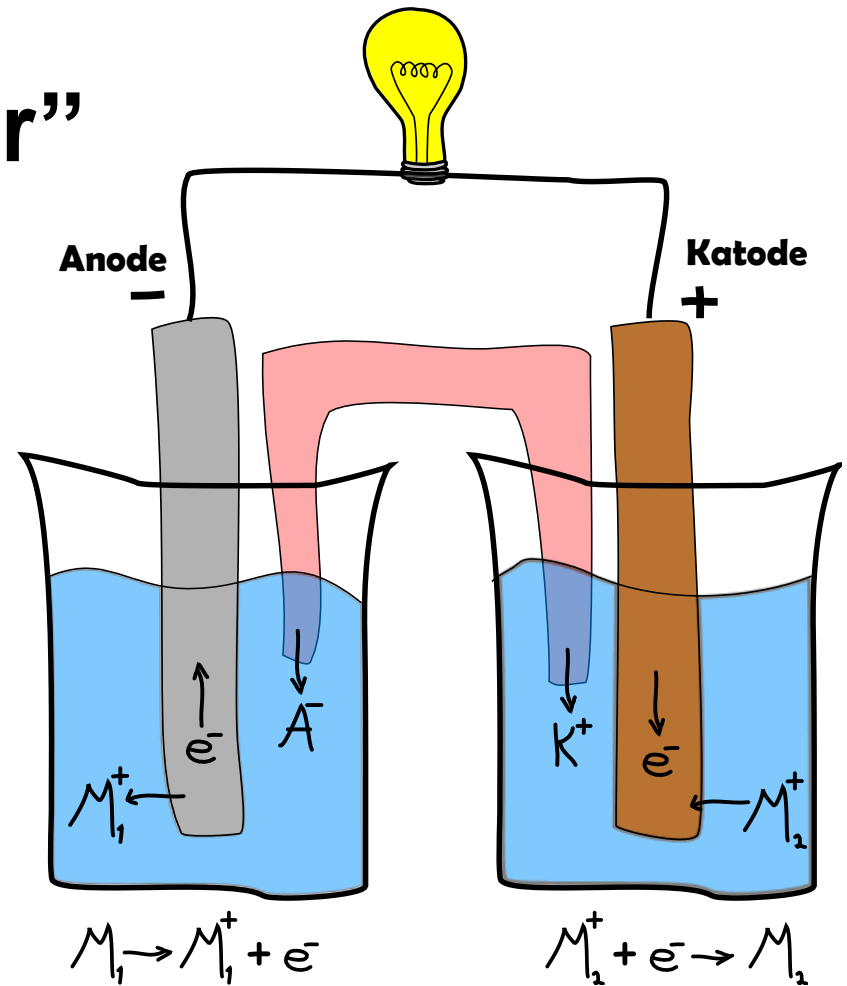
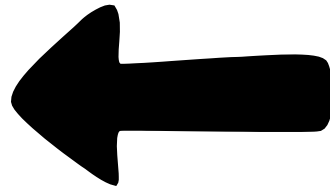
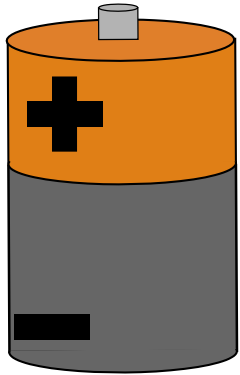


# Batteribetegnelser

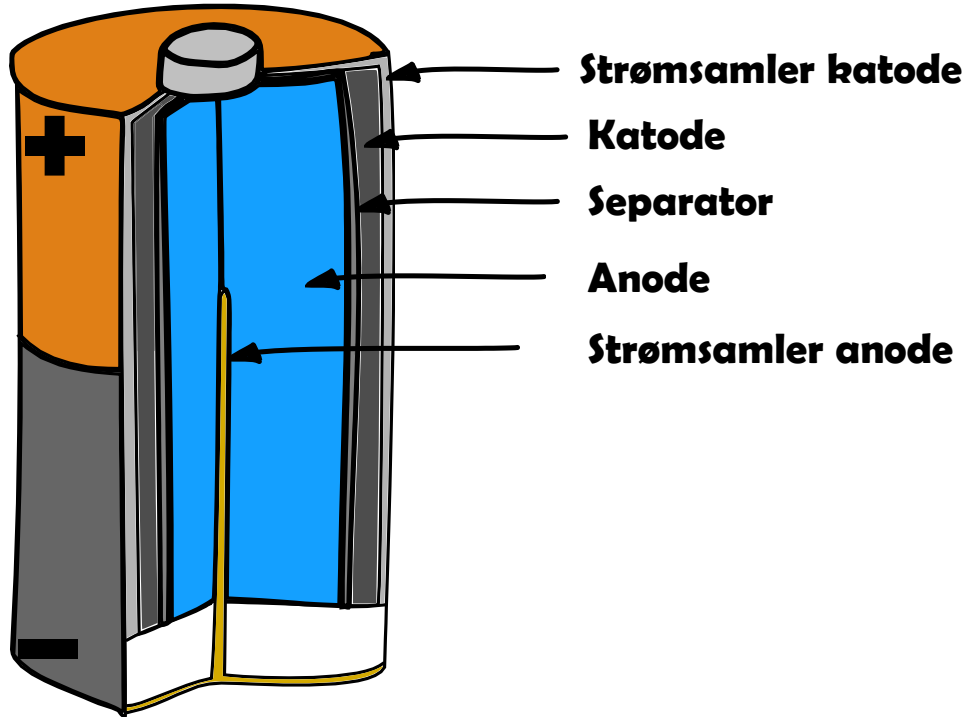
- Reversibilitet
- Opp-/utladingshastighet
- Ladedybde
- Levetid



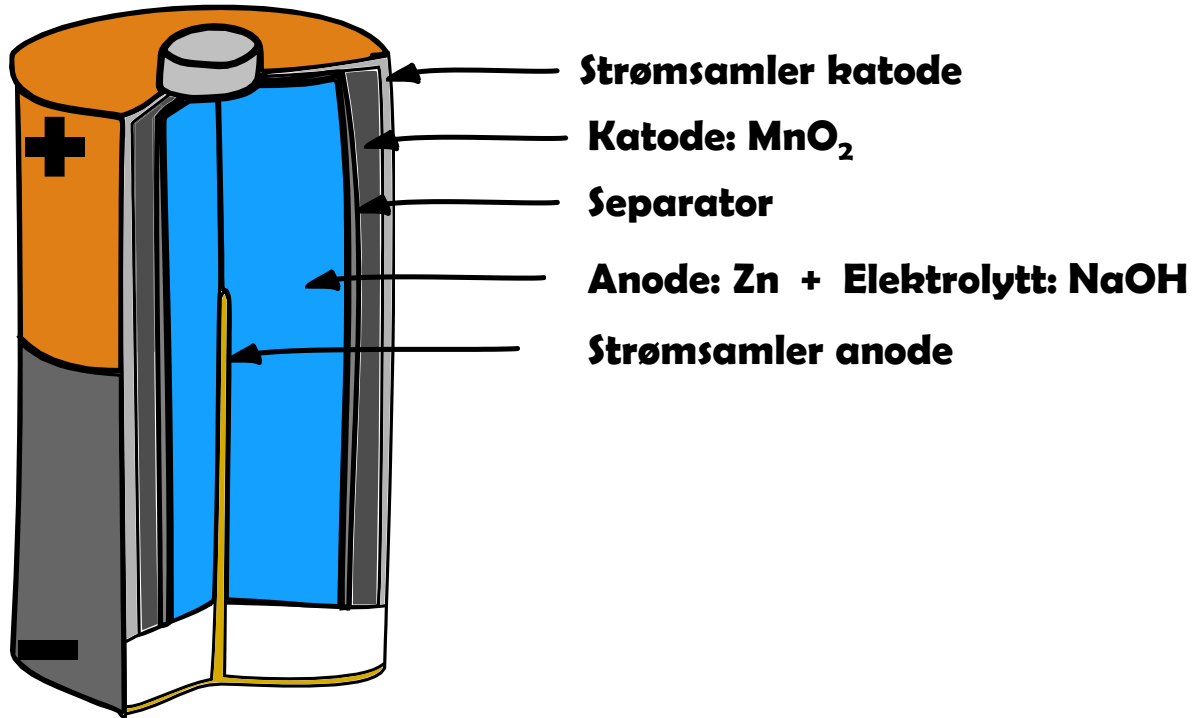
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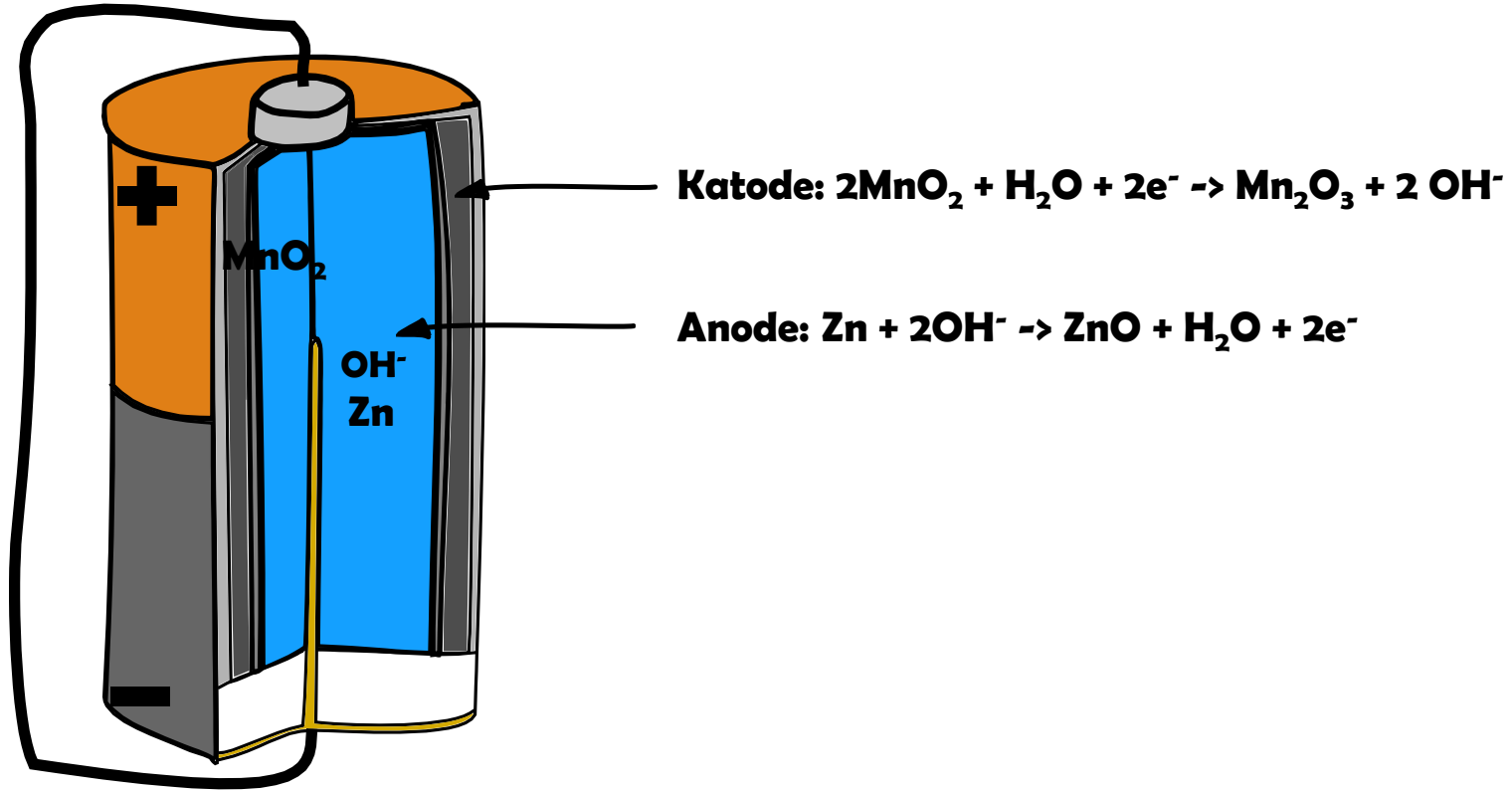
# “Ordentlige batterier”



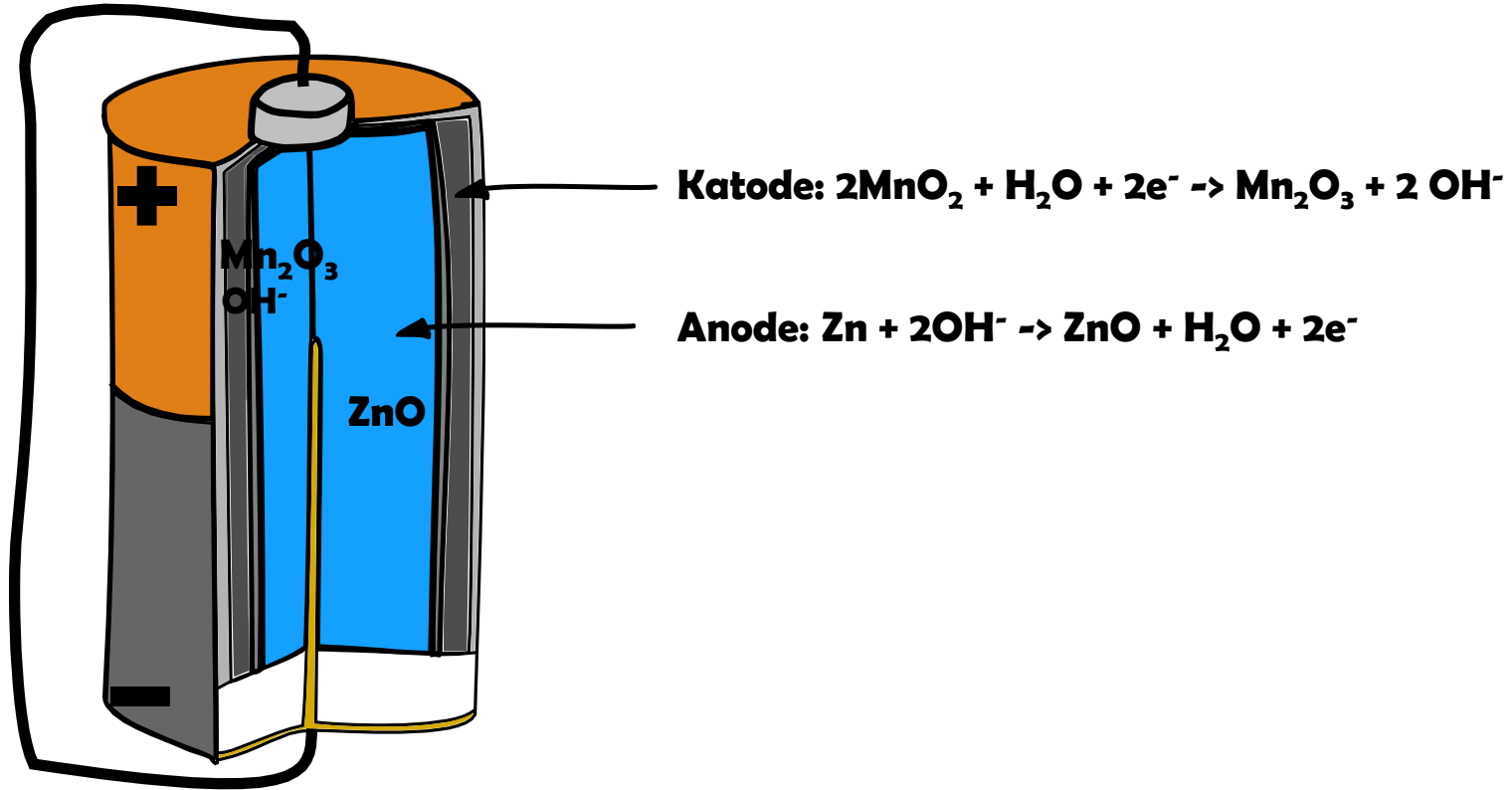
# Alkaliske batterier



# Alkaliske batterier



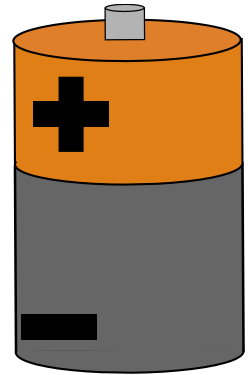
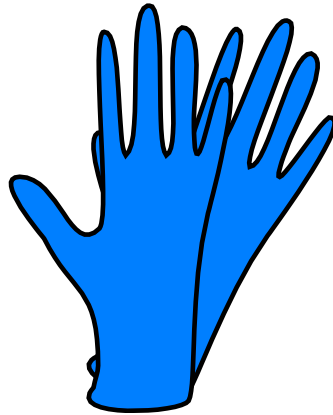
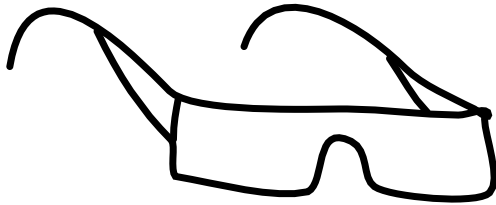
# Alkaliske batterier





# Åpne et alkalisk batteri

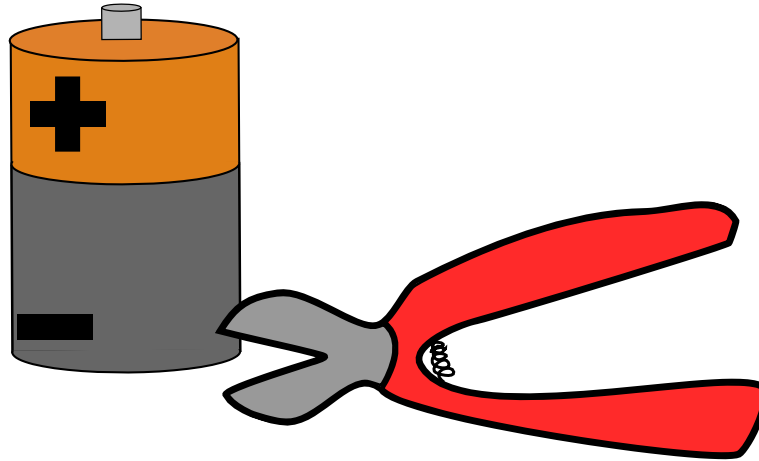
- Hva trenger vi?



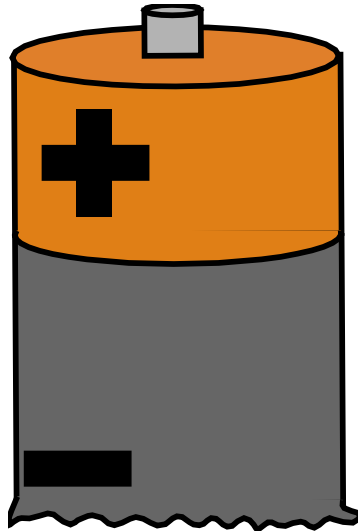
# Åpne et alkalisk batteri



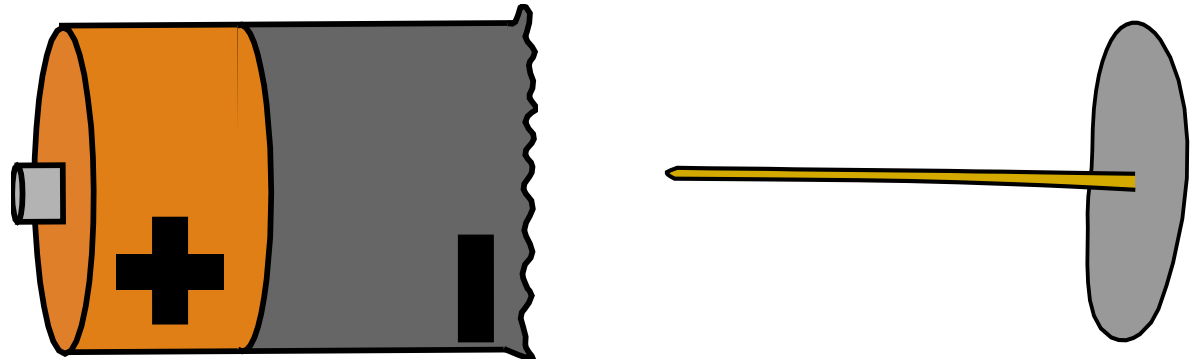
# Åpne et alkalisk batteri



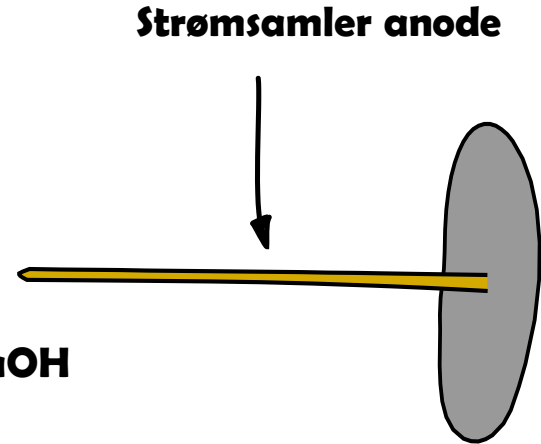
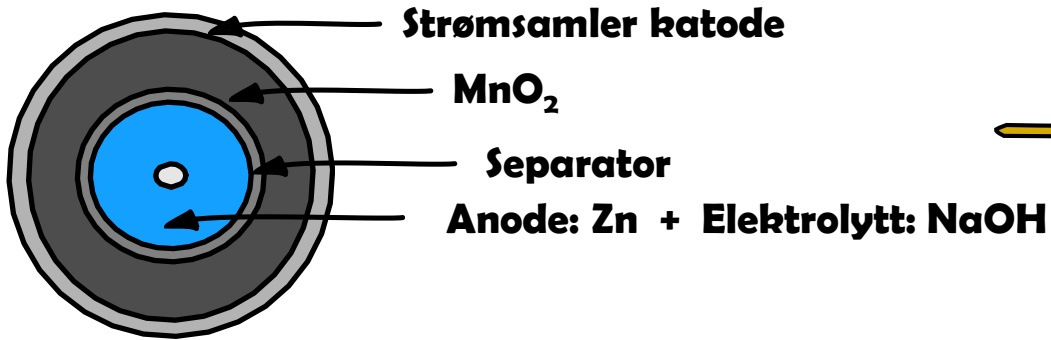
# Åpne et alkalisk batteri



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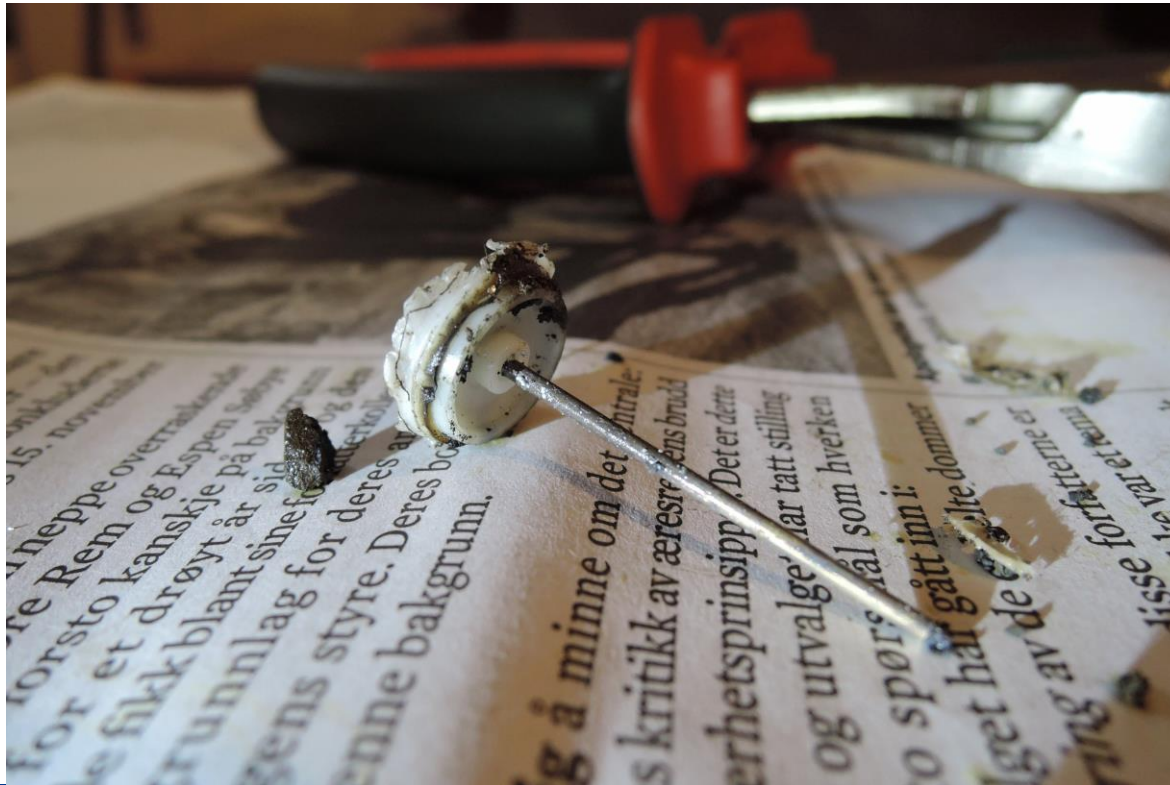
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