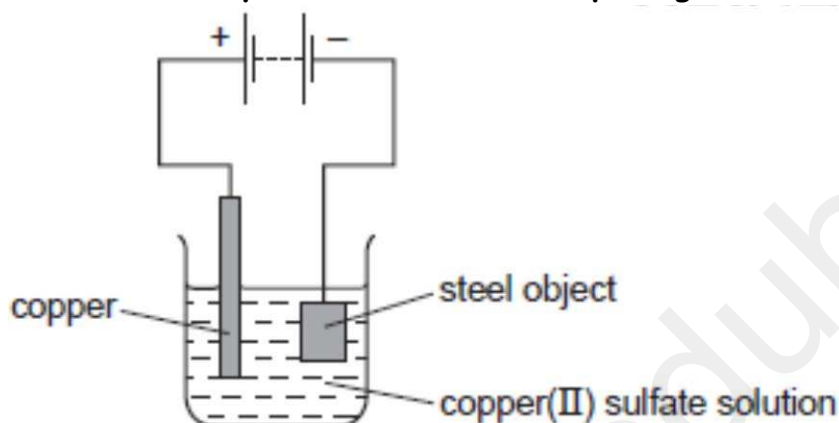


# Applications of electrolysis

## Electroplating:

- Electroplating is the plating of one metal on the top of the other.
- The object to be plated is made the cathode.
- The metal that is used to plate the object is made the anode.
- The electrolyte is a salt of the plating metal. So the size of the anode decreases.

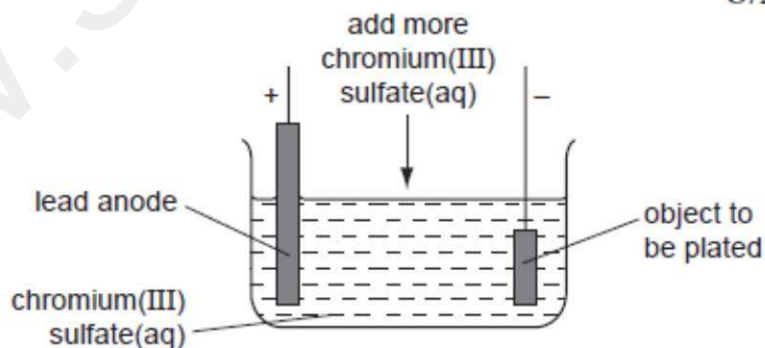


Also the ions lost at the cathode are replaced by the anode. In this case the colour of the electrolyte does not change.

- If the electrolyte is not a salt of the plating metal, and if the ions from the electrolyte are involved in plating the objects, then the electrolyte needs to be added.

Chromium is used to electroplate steel objects. The diagram shows how this could be done.

O/N/10/V32-Q4



This is because the electrolyte is getting used up. The ions lost at the cathode are not being replaced by the anode.

- **Some of the uses of electroplating are:**

1. To prevent metals from rusting
  2. To improve the appearance of objects/makes them more shiny/attractive
  3. To give the objects , a hard surface
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