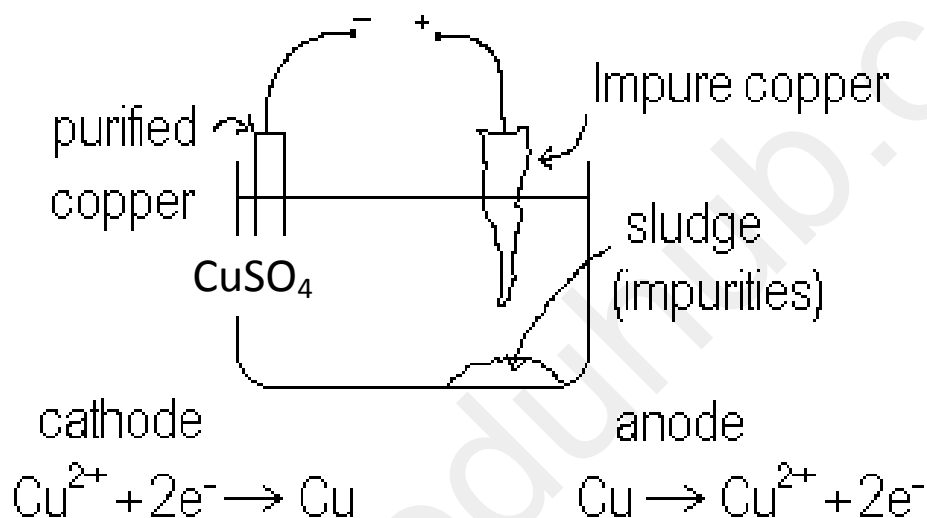


Purifying copper

- The impure copper is used as the anode
- The pure copper is used as the cathode.
- The electrolyte is a salt of copper (copper sulfate).



- The size of the anode decreases as the pure copper atoms undergo reduction and go into the solution as copper ions.
- The size of the cathode increases as the copper ions from the electrolyte accept electrons at the cathode and deposit themselves as copper atoms.
- The impurities fall at the bottom of the cell. They are called as anode sludge or anode slime.
- The colour of the electrolyte does not change as the copper ions removed from the solution at the cathode are replaced by the copper ions produced at the anode.

- Copper is used for various purposes. The use depends on the properties of copper.

Property of copper	
Property of copper	Uses
<ul style="list-style-type: none"> • Good conductor • malleable and ductile 	Used in electrical wiring
<ul style="list-style-type: none"> • Good conductor of heat • High melting point and high boiling point • Unreactive /Resists corrosion • Malleable or ductile 	Used to make cooking utensils
<ul style="list-style-type: none"> • Malleable and ductile 	Alloys, Jewellery, electroplating, making roofs.

