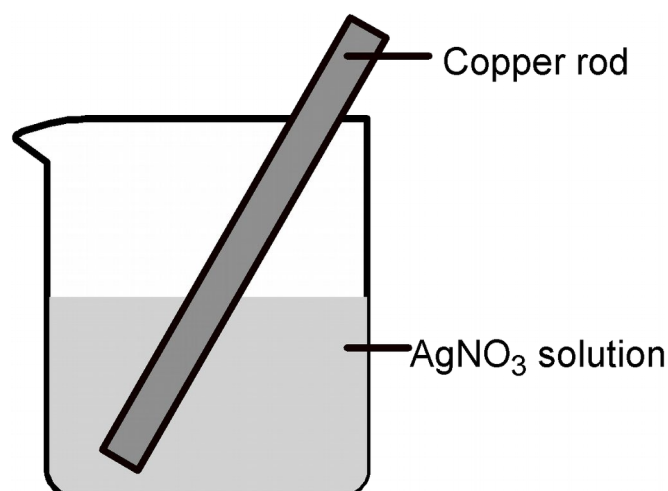


Unit 3: Reactivity series and Electrochemistry

**Displacement reactions**



A copper plate is immersed in AgNO<sub>3</sub> solution, gets a layer of Ag deposited on its surface.

Observe the changes after sometime.

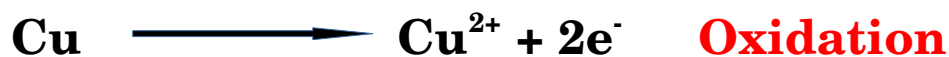
Ag get deposited at the Cu plate.

The intensity of the colour of the solution changes.

The chemical reaction taking place here



Ag gets displaced by Cu.



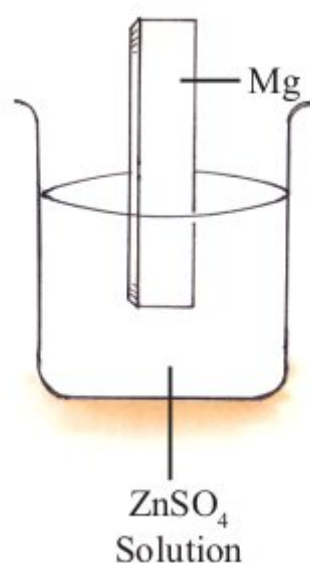
## Questions

1. Which among the following is the least reactive metal?

( Calcium, Magnesium, Copper )

2. Observe the picture given below. Predict whether it undergo displacement reaction ?

If yes write the chemical equation , oxidation reaction equation and reduction reaction equation.



3. The solution of  $\text{ZnSO}_4$  ,  $\text{FeSO}_4$  and  $\text{CuSO}_4$  are taken in three different test tubes. Suppose, an iron nail is kept immersed in each one.

a) In which test tube the iron nail undergoes a colour change ?

b) What is the reaction taking place here ?

c) Justify your answer.

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