

**THIRUVANATHAPURAM EDUCATIONAL DISTRICT  
CHEMISTRY X  
CHAPTER 4 MODULE 3**

**CW12 X EM**

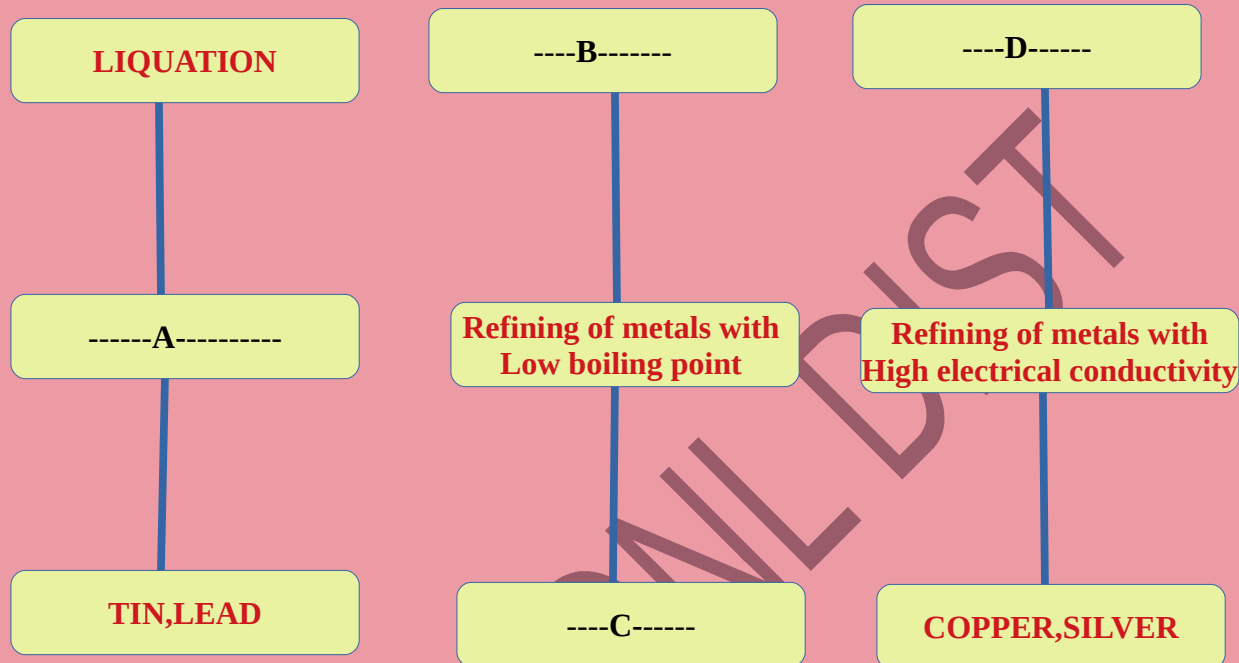
- 1. What are the important stages of extraction of metal from concentrated ore?**
- 2. An ore of zinc is calamine. Name the method used to extract the zinc oxide from the ore and define that method?**
- 3. Name the process of heating the concentrated ore in a current of air at a temperature below its melting point ? Write an example?**
- 4. The process of extraction of metal from its oxide ore is -----  
(Oxidation/ Reduction)**
- 5. Name the reducing agents used in the production of metals?**

6.

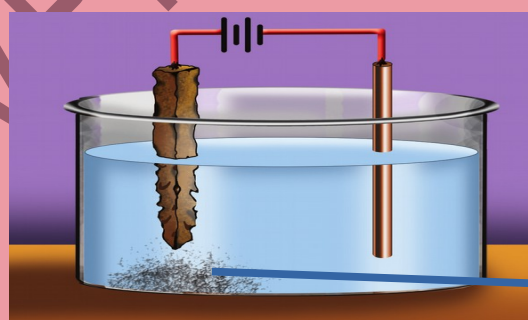
In some metals like **sodium, potassium and calcium**, **Electricity** is used as their reducing agent. While in metals like **zinc and iron**, **Carbon and Carbon monoxide** are used as their reducing agent.  
So what may be the reason!



7. Refining of metal is the process of removal of the impurities to get pure metal. Complete the given flow chart suitably.



8. Electrolytic refining of copper is given. Answer the given questions:



anode mud

- Write the anode, cathode and electrolyte used there?
- Write the reactions taking place at anode and cathode?
- What is anode mud?