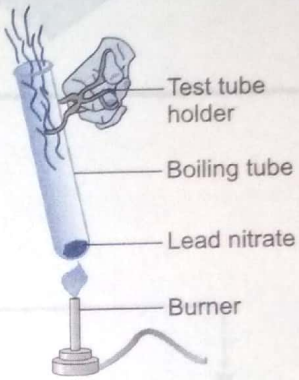
15. Identify the type of each of the following reactions:
   (*a*) A reaction in which a single product is formed from two or more reactants.
   (*b*) The reaction mixture becomes warm.
   (*c*) An insoluble substance is formed.
16. Illustrate an activity to show a double displacement reaction. Give the chemical equation of the reaction that takes place.

Long Answer Questions **[5 marks]**

17. Why aluminium sheets do not corrode easily? Why does a copper vessel get covered with a green coating in rainy season?
18. Observe the diagram given alongside and answer the following questions:
   (*a*) What do you observe when lead nitrate is heated?
   (*b*) Mention the two gases evolved during heating.
   (*c*) Write the balanced chemical equation for it.
   (*d*) What is the type of chemical reaction called?
   (*e*) Give one more example of this type of reaction.



19. (*a*) (*i*) Define corrosion. Under what conditions does corrosion take place?
   (*ii*) Give the formula and the chemical name of rust.
   (*b*) Give two methods to slow down rancidity.
20. Write balanced chemical equations for the following word equations:
   (*a*) Calcium hydroxide + Carbon dioxide $\longrightarrow$ Calcium carbonate + Water
   (*b*) Phosphorus pentachloride + Water $\longrightarrow$ Phosphoric acid + Hydrogen chloride
   (*c*) Zinc + Silver nitrate $\longrightarrow$ Zinc nitrate + Silver
   (*d*) Sodium + Water $\longrightarrow$ Sodium hydroxide + Hydrogen
   (*e*) Aluminium + Copper chloride $\longrightarrow$ Aluminium chloride + Copper