

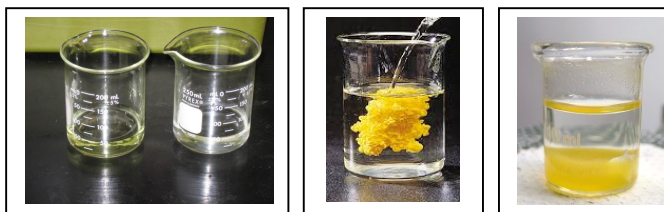
**EXPERIMENT - 2****CHEMICAL DOUBLE DISPLACEMENT REACTION**

**Aim** : To observe the chemical double displacement reaction.

**Required** : Boiling tubes or small beakers-3, Water, Lead nitrate, Potassium iodide, Dropper, Spatula

**Description**: If two reactants exchange their constituents or radicals chemically and form two new products, then it is called chemical double displacement reaction.

**Example** : Sodium chloride + Silver nitrate → Sodium nitrate + Silver chloride

**Procedure** :

1. Take 2 gm of Lead nitrate in a beaker. Add 25 ml of water. Lead nitrate aqueous solution is formed. (Use spatula to take chemical.)
2. Take 2 gm of Potassium iodide in another beaker. Add 25 ml of water. Potassium iodide aqueous solution is formed. (Use spatula to take chemical.)
3. Take 20 ml of prepared Lead nitrate solution in to third beaker.
4. Add Potassium iodide solution to it , drop by drop with dropper.
5. Observe what happens. [ignitephysics.weebly.com](http://ignitephysics.weebly.com)
6. Observe the change in colour of solution and observe the change in state of solution.

**Observation** :

- ❖ Potassium iodide aqueous solution and Lead nitrate aqueous solutions are colourless.
- ❖ The mixture of two solutions turns in to yellow colour at first.
- ❖ After some time, yellow colour precipitate settle down in the bottom of the beaker.
- ❖ Due to reaction between Lead nitrate and Potassium nitrate, Lead and Potassium interchange their places and form Lead iodide (Yellow colour precipitate) and Potassium nitrate (Colourless solution).
- ❖ Lead nitrate + Potassium iodide → Lead iodide + Potassium nitrate
- ❖ This is chemical double displacement reaction.

**Precautions** :

- ❖ Do not make the solution disturbed until the reaction takes place.

**Result** :

- ❖ Observed the chemical double displacement reaction.