

# Class X

## EXPERIMENT No: 10

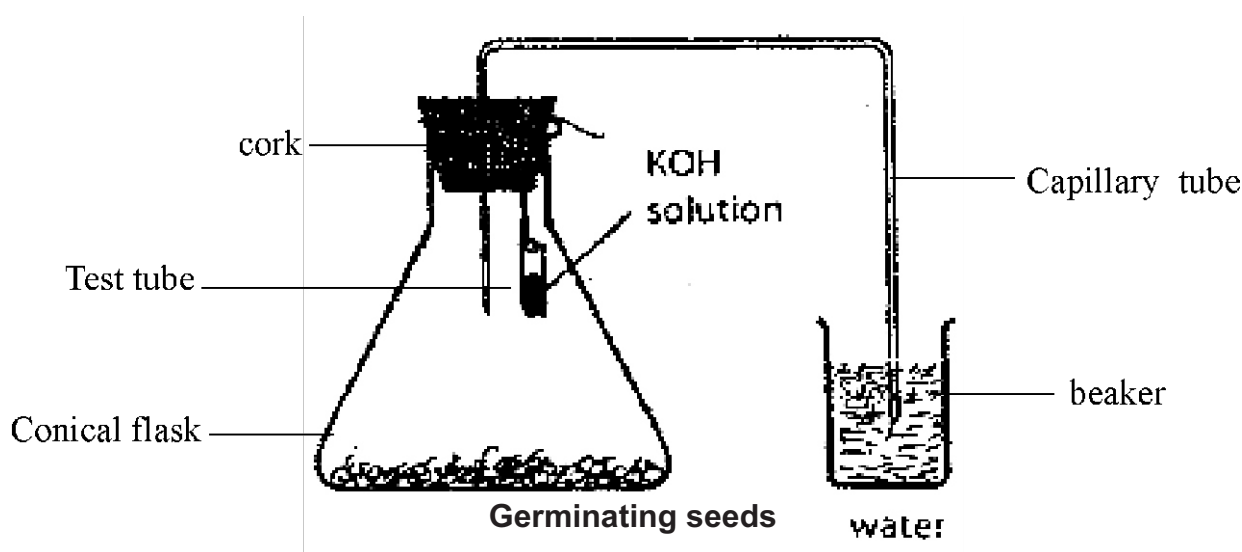
**AIM:** To show experimentally that carbon dioxide is given out during respiration.

**Materials Required :**

Germinating seed, conical flask, small test tube containing KOH, small thread, bent capillary tube, beaker and cork.

**Procedure :**

1. Take some germinating seeds of moong dal in a conical flask.
2. Place a small test tube containing KOH solution in hanging position in the flask.
3. Fix a bent capillary tube with one end in conical flask and other end in the beaker containing colored water.
4. Keep the set up for about two hours and observe change in water level in capillary tube.



**Observation :**

1. Note the water level position at the start of the experiment.
2. Record the rise of water level in capillary tube.
3. Record water level change in record book.

**Result and Inference :**

1. Germinating seeds absorb oxygen of conical flask and release  $\text{CO}_2$ .
2. Released  $\text{CO}_2$  is absorbed by KOH

3. Water rise up in capillary to fill space created by gas.
4. Germinating seeds give out CO<sub>2</sub> during respiration.

**Precaution :**

1. Mouth of conical flask should be air tight with cork.
2. Handle KOH carefully since it is corrosive.
3. Seeds should be germinated and respiring.
4. Hang small test tube with the help of a fine thread.
5. Colored water gives better observation.