

## Activity-5

To show that air contains oxygen (an active part) and nitrogen (an inactive part).

Fix a candle in the middle of a shallow container. Fill the container with some water. Cover the candle with an empty jar and mark the level of water inside the jar. Now lift the jar and light the candle and cover it with the jar again.

Observation: you will notice that the candle continues to burn for some time and then gets extinguished. The water level rises slightly, upto  $\frac{1}{5}$ th part of the jar containing air. This  $\frac{1}{5}$  part is active air i.e. oxygen which helps the candle to burn. When it is used up,

Candle stops burning. The  $\frac{4}{5}$  part of air still present in the ~~air~~ jar is inactive air that does not support burning, and it is nitrogen.

It is now clear that air is made up of an active part and an inactive part.

The active part of air, which is used up

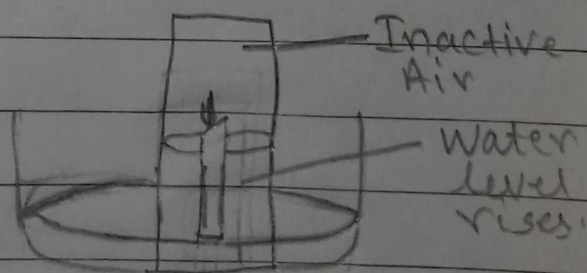
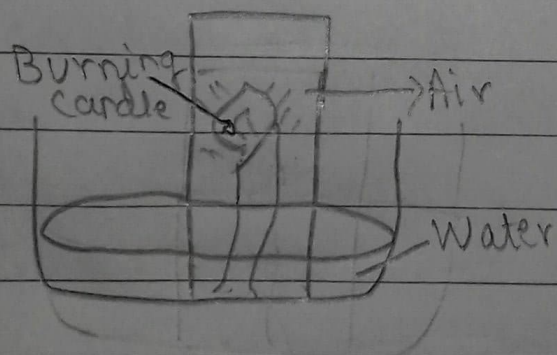
when substances burn, the inactive part which does not support burning, consists mainly of a gas called nitrogen.

It ~~proves~~ proves that air contains

oxygen, it also proves that air

contains nitrogen. It is observed that

candle in the jar burns till it gets oxygen from air.



## Activity - 6

To show that air contains carbon dioxide.

Take a test tube fitted with a two-bore rubber cork. Fit a long tube through one hole and fit a short bent tube with the other hole. Take out the cork and put some fresh lime water into the test tube. Fit the cork again. Blow air by an air pump through the long tube.

Observation :- The air blown through lime water turns milky because due to carbon dioxide which is present in air reacts with the lime water and turns it milky.

This shows that air contains carbon dioxide.

