

ACT - 5

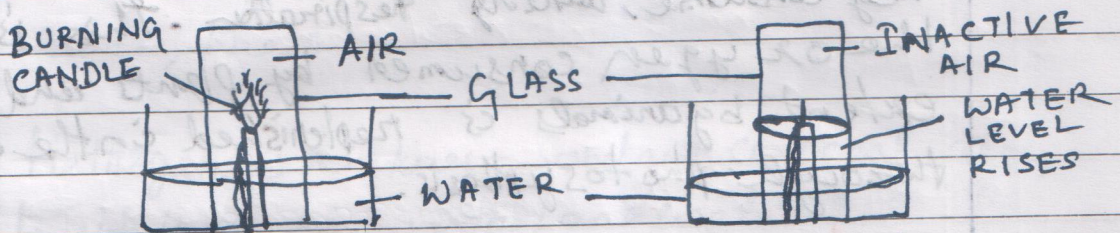
TO SHOW THAT AIR CONTAINS

OXYGEN (an active part) and
Nitrogen (an inactive part) →

Fix a candle in 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.

Observe carefully. You will notice that the candle continues to burn for some time and gets extinguished. The water level rises slightly; i.e. up to $\frac{1}{5}$ th part of the jar containing ~~air~~ air. This

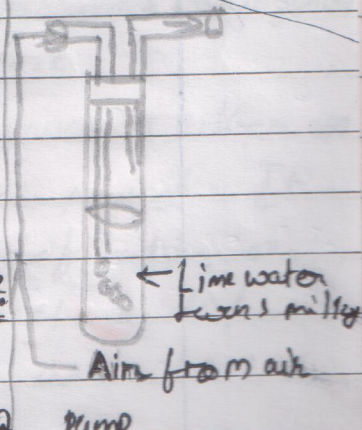
part is active air i.e. Oxygen which helps the candle to burn. When it is used up, candle stops burning. The $\frac{4}{5}$ th part of air still present in the air still present in the jar is inactive air that does not support burning, and it is nitrogen.



Air contains Oxygen and Nitrogen

Activity-6 To Show that air Contains Carbon Dioxide

Take a test tube fitted with a two bore rubber cork, fit a long bent tube through one hole and fit a short bent tube through the other hole. Take out the cork and pour some freshly prepared lime water into the test tube. Fit the cork again. Make sure that the long bent tube is immersed in lime water while the short one remains suspended in air. Blow ^{tube} air by an air pump through the long ^{hole} tube.



You will observe that the air blown through the lime water turns milky. Why does lime water turn milky? Carbon-dioxide is present in ~~the~~ ^{the air} reacts with lime water and turns it milky. This shows that air contains carbon dioxide.

Air contains carbon dioxide.