

23.11.21

Homework

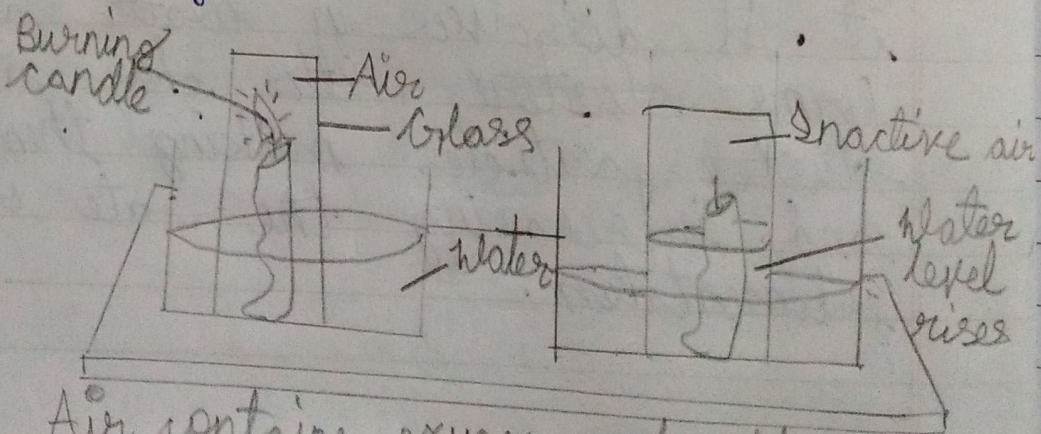
Activity - 5

Experiment

Aim of the Activity: To show that air contains oxygen (an active part) and nitrogen (an inactive part).

Apparatus required: Candle, shallow container, water, empty jar, matchstick.

Procedure: Fix the candle in the middle of the 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.



Air contains oxygen and nitrogen

Observation: We notice that the candle continues to burn for sometime and then gets extinguished. The water level rises slightly, i.e. upto $\frac{1}{5}$ part of the jar containing air.

Conclusion: From the ~~above~~ above experiment, we conclude that air contains an active part i.e. oxygen which supports burning and an inactive part i.e. nitrogen that does not support burning.

Activity - 6

Aim of the Experiment: To show that air contains carbon dioxide.

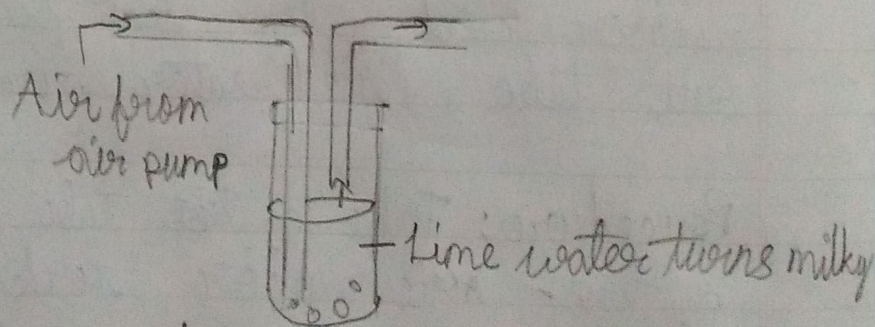
Apparatus required: test tube, two-bore rubber cork, long bent tube, short bent tube, lime water, air pump.

Procedure: 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 air by an air pump through the long tube.

Observation: We observe that the air blown through lime water turns it milky.

Conclusion: Carbon dioxide that is present in the air reacts with lime water and turns it milky. This shows that air contains carbon dioxide.



Air contains carbon dioxide