11. Our Need for Air



Can you tell?

A riddle to solve!

There's something there, it is to be found
Up and down and all around.
You can't touch it, you can't see it,
But sure as sure, you can name it!





Try this.





Blow a balloon. What did you fill into it?

Air

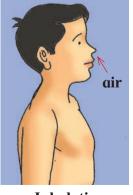
There is air all around us. Though we can feel it, we cannot see it. Air does not have colour, smell or taste.

New terms:

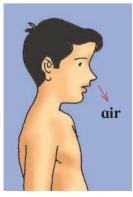
Inhalation: We breathe in air through our nose. That is inhalation.

Exhalation : We breathe out air through the nose. That is exhalation.

Respiration: Inhalation and exhalation are together called breathing. We breathe continuously. That is called respiration.



Inhalation



Exhalation



When a man is sleeping quietly, why do we see his chest going up and down?

• Why do we breathe?

We need our body to function properly. We need air for that purpose. When we breathe in, we take air into our body. Air makes us feel fresh and lively. Air is necessary for our body to get the vigour we need to work properly.

Like us, all other living things also need air. If we look carefully, we can see a dog's chest also going up and down. It tells us that animals also breathe.



Do you know?

• Fish live in water. It makes one wonder how they get the air to breathe. But fish are able to use the air that is dissolved in water.



Some people keep fish in a glass fish-tank. It is called an aquarium. It is always full of water. The fish in the aquarium use the air dissolved in the water for breathing.

As a result, the amount of air dissolved in the water can get reduced. If all the air was used up, the fish would die. Therefore, more air is continuously added to the water in the aquarium. That is why, we see air bubbles rising up through the water in such fish-tanks.



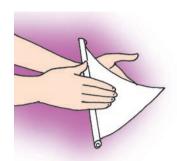
- Take a glass more than half full of clean water.
- Take a small piece of a newspaper sheet. Roll it to make a straw, about 10 cm long.
- Dip one end of the straw into the water.
- Through the other end, blow into it with your mouth.

What do you see?

• Bubbles rise up in the water.

What does this tell us?

 You blew air into the water. This air rose up and escaped in the form of bubbles.







What we have learnt -

- * There is air everywhere.
- * We cannot see it with our eyes.
- * Air does not have colour, smell or taste.
- * Living things need air for respiration.



Always remember -

Every day one must spend some time playing in an open playground to get fresh air.



A. What's the solution?

In a crowded place, someone is feeling suffocated, that is, finding it difficult to breathe.

B. Fill in the blanks.

(need, air, breathing)

- (1) As goes on continuously, a sleeping man's chest can be seen going up and down.
- (2) There is spread all around us.
- (3) Like us, all living things have a for air.

C. Answer the following questions:

- (1) What do you fill into a balloon when you blow it?
- (2) Why do we need air?
- (3) How do you know that a dog also breathes?
- (4) For what does a cat need air?



D. True or false?

- (1) We can see air all around us.
- (2) Fish use the air dissolved in water for breathing.

Activity

- Hold an empty mug upside down on the surface of the water in a bucket.
 Press it down into the water.
 - Dip it down in water in different ways. What do you see happening? Tell your friends about it.

