

## Chapter 3

### Air

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#### I. Fill in the blanks using the given words:

(air, weight, raises, lungs, inhale)

**Question 1.**

Air has \_\_\_\_\_ .

**Answer:**

weight

**Question 2.**

Things need \_\_\_\_\_ for burning.

**Answer:**

air

**Question 3.**

The process by which we breathe in air is known as \_\_\_\_\_

**Answer:**

inhale

**Question 4.**

The organ that helps us to breathe is \_\_\_\_\_.

**Answer:**

lungs

**Question 5.**

When we breathe in air, the chest up \_\_\_\_\_.

**Answer:**

raises

#### II. Write 'T' if True and 'F' if False:

**Question 1.**

Air is nowhere.

**Answer:**

False

**Question 2.**

Air fills the empty space.

**Answer:**

True

**Question 3.**

Clouds move because of the movement of air.

**Answer:**

True

**Question 4.**

A very strong wind is called gale.

**Answer:**

True

**Question 5.**

We release oxygen during breathing.

**Answer:**

False

### **III. Circle the odd one and answer the Question:**

**Question 1.**

Balloon, Cycle tube, Foot ball, Cricket ball

**Answer:**

Cricket ball

Why is it different from the rest?

**Answer:**

It does not contain air in it.

**Question 2.**

Kite, Balloon, Stone, Feather

**Answer:**

Stone

Why \_\_\_\_\_ differs from the rest?

**Answer:**

It differs from the rest, because it is heavy.

### **IV. Answer the following:**

**Question 1.**

What are the properties of air?

**Answer:**

It has no definite shape and colour. Air has weight and it occupies space. We cannot see air but it can be felt. Air can flow everywhere.

**Question 2.**

Write the use of windmill.

**Answer:**

Electricity is generated from wind with the help of the windmills.

**Question 3.**

What is breathing?

**Answer:**

Inhalation is the process of taking the air inside and exhalation is the process of releasing the air outside. This cyclical process of inhalation and exhalation is called breathing.

**Question 4.**

Write the processes involved in breathing.

**Answer:**

The processes involved in breathing are inhalation and exhalation.

**Question 5.**

Write the types of wind based on the speed of air.

**Answer:**

Based on the speed of air, wind can be classified as breeze, storm & gale.

**Question 6.**

Differentiate between land breeze and sea breeze.

**Answer:**

Land breeze	Sea breeze
1. The breeze that blows from the land towards the sea during night time	The breeze that blows from the sea towards the land during day time
2. The warm air from the sea rises up and the cold air from the land moves towards the sea.	The warm air from the land rises up and the cold air from the sea occupies the space over the land

**InText Activity:****Warm-up (Text Book Page No. 92):**

Observe the pictures and answer the given question.



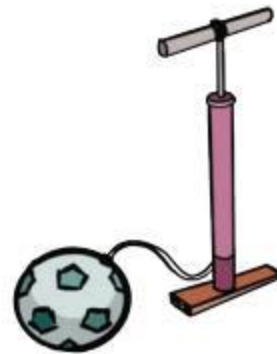
Blowing balloon



Flying kite



Making bubbles



Filling the ball

What is necessary for these activities?

**Answer:**

Air

**Try to answer (Text Book Page No. 94):**

a. Write true or false for the following statements.

**Question 1.**

Air occupies space but has no weight.

**Answer:**

False

**Question 2.**

Air is colourless.

**Answer:**

True

**Question 3.**

Air has definite shape.

**Answer:**

False

b. If we fill air in the \_\_\_\_\_, it will change its shape.

- (1) jar
- (2) jug
- (3) ball

**Answer:**

- (3) ball

c. Which of the following is required for good health?

- (1) Dust
- (2) Clean air
- (3) Smoke

**Answer:**

- (2) Clean air

### Let us Try (Text Book Page No. 95):

#### Question 1.

Make a paper plane with waste paper and fly it in the air.

These activities conclude that air \_\_\_\_\_ the things.

**Answer:**

moves and pushes

#### Question 2.

Air is required for burning.

Light a candle and place it on a table. Now cover the lightening candle with a glass jar.

Observe what happens?

\_\_\_\_\_ is required for burning things.

**Answer:**

Air.

### Let us Do (Text Book Page No. 96):

Air Jack

Materials required:

Empty plastic milk cover, a piece of thick string and an old pen body or pipe.

Procedure:

Tie an old pen body or a pipe to the mouth of the milk cover with a string. Place 3 or 4 thin note books up on the plastic milk cover and slowly blow air into it with your mouth. As the cover gets inflated the books get raised. How does that work? The pressure that you exert with your mouth is limited. But the large area of the milk cover magnifies this pressure and lifts the books.



The above activity shows that \_\_\_\_\_.

- (1) Air rises up on getting warm
- (2) Air is needed for burning
- (3) Air has pressure

**Answer:**

- (3) Air has pressure

### Think zone (Text Book Page No. 97):

Why the doctor-in our chest raises up and when we breathe-out it lowers down.

**Answer:**

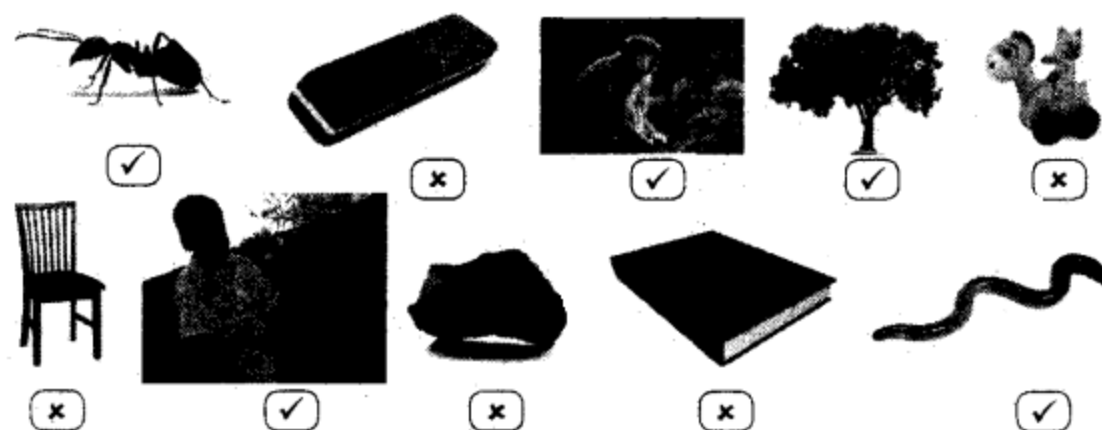
Doctor will usually check your pulse to counting your pulse rate, it is a simple way to find out how fast your heart is beating.

### Let us Do (Text Book Page No. 97):

Tick (✓) the one which breathes and cross (X) the one that does not breathe.



**Answer:**



### Let us Write (Text Book Page No. 97):

Choose and write the correct answer for the following actions.

S.No	Actions	Inhalation / Exhalation
1	Air moves out of the lungs	
2	Air goes into the lungs	
3	Chest raises up	
4	Chest lowers down	

Answer:

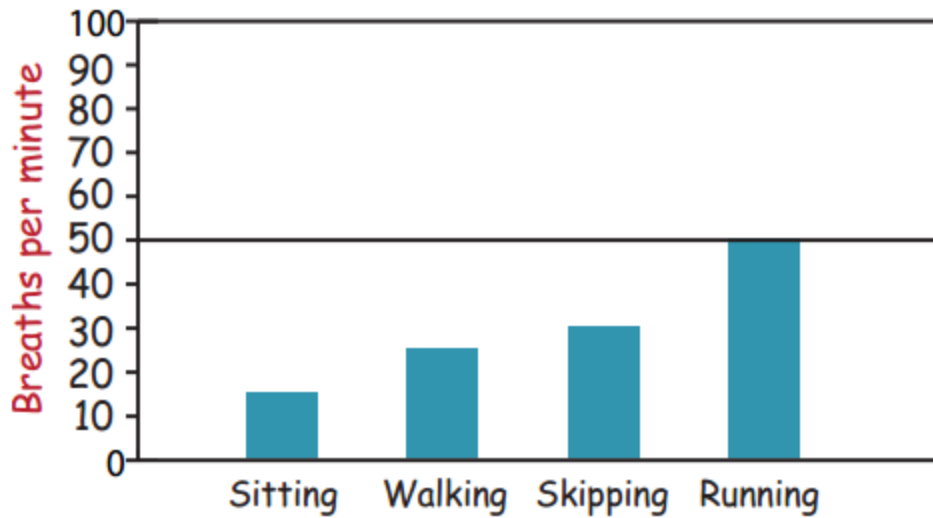
S. No.	Actions	Inhalation / Exhalation
1	Air moves out of the lungs	Exhalation
2	Air goes into the lungs	Inhalation
3	Chest raises up	Inhalation
4	Chest lowers down	Exhalation

### Try to Answer (Text Book Page No. 98):

The effect of exercise on breathing:

Mathi and Mozhi practised various exercises like walking, skipping and running. They counted the number of times they breathed in one minute after each exercise and recorded their results in the bar diagram:

## Bar diagram



Look at the bar diagram.

a. Which activity raised the breathing rate the most?

**Answer:**

Running

b. Which activity do you think exercises the heart muscle the least?

**Answer:**

Sitting

c. Write 'T' if True and 'F' if False.

**Question 1.**

They breathed more number of times when they were walking.

**Answer:**

(F)

**Question 2.**

They breathed less number of times when they were sitting.

**Answer:**

(T)

**Question 3.**

They took 50 breaths per minute when they were running.



**Answer:**  
(T)

**Question 4.**

The more vigorous (active) the exercise, the greater the number of breaths.

**Answer:**  
(T)

**Let us connect (Text Book Page No. 100):**

a. Breeze	Strong wind
b. Storm	Very strong wind
c. Gale	Gentle wind

**Answer:**

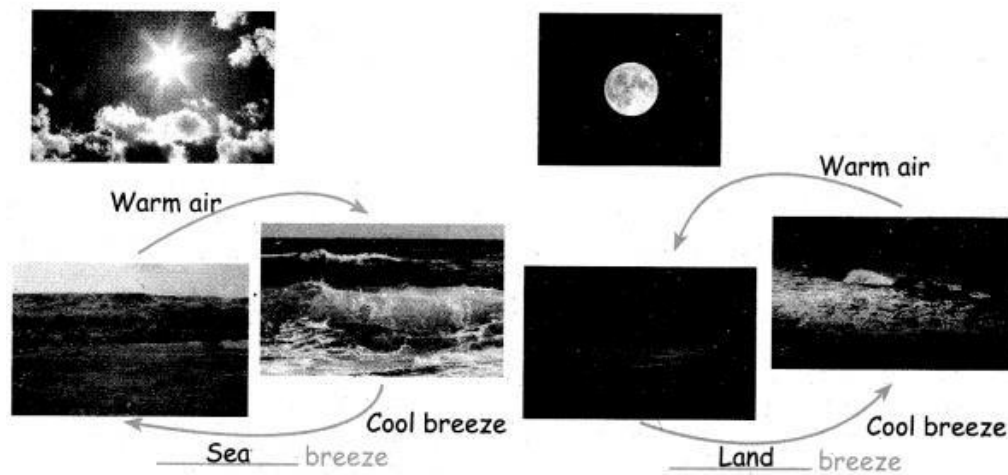
a. Breeze	Gentle wind
b. Storm	Strong wind
c. Gale	Very strong wind

**Let us draw (Text Book Page No. 101):**

Draw the movement of air for land breeze and sea breeze.



**Answer:**



### Try to Answer (Text Book Page No. 101):

Fill in the blanks.

**Question 1.**

Gentle air is called \_\_\_\_\_.

**Answer:**

breeze.

**Question 2.**

We get electricity from wind using \_\_\_\_\_

**Answer:**

wind mills

**Question 3.**

The air that flows from the land towards the sea is \_\_\_\_\_

**Answer:**

Land breeze

**Question 4.**

Sea breeze is the air moving from \_\_\_\_\_ towards \_\_\_\_\_.

**Answer:**

Sea, Land

### Try to Answer (Text Book Page No. 102):

What will you do during disaster.  
(I will/I will not)

a. \_\_\_\_ watch TV when it rains heavily.

**Answer:**

I will not

b. \_\_\_\_ follow the warnings.

**Answer:**

I will

c. \_\_\_\_ stand under a tree when heavy wind blows.

**Answer:**

I will not