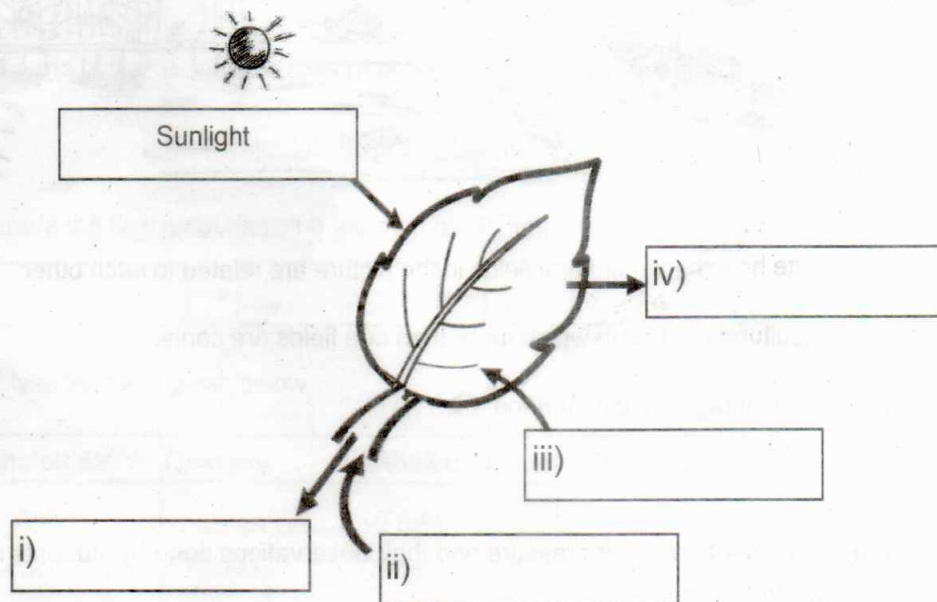


**Instructions**

- ◆ 15 minutes is given as cool off time. This time is to be used for reading the question paper.
- ◆ Attempt any 8 from the 10 activities given below.

**Activity - 1**

The factors that are absorbed and produced by plants in connection with photosynthesis are given in the picture.



- a) Write the other factors.
- b) The Venus fly trap and Pitcher plants catch insects due to the lack of an important element essential to the growth of plants. What do we call such type of plants?
- c) Write the peculiarities of the soil in which they grow.

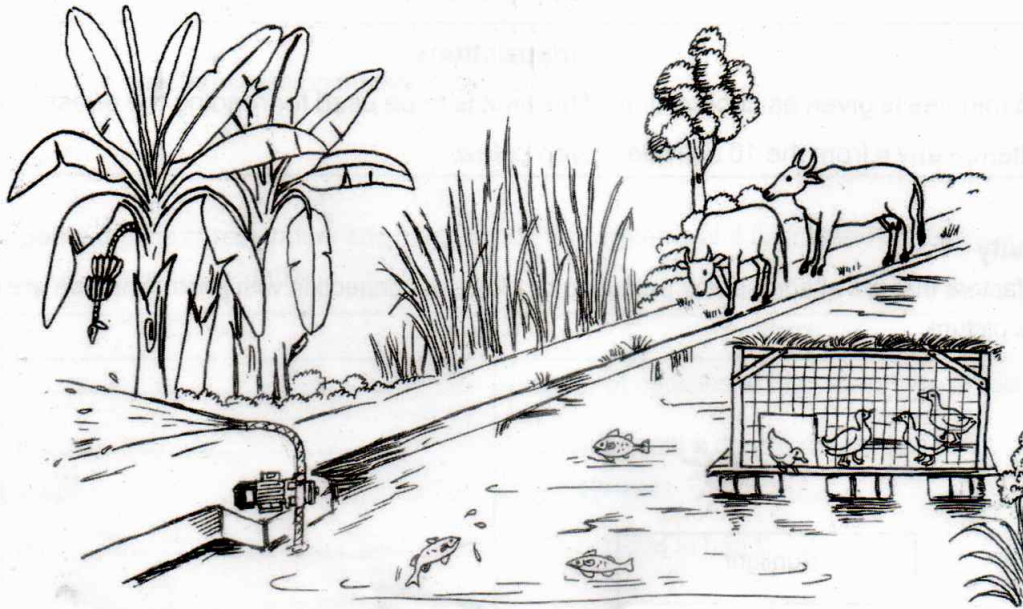
**Activity 2**

Increasing the amount of carbon dioxide in atmosphere is the main reason for global warming.

- a) Write two situations which cause the increase of carbondioxide
- b) How does the air pollution affect the health of human beings? Write two instances.
- c) Which gas causes acid rain?

### Activity - 3

Observe the picture.



- Identify and write how the agricultural fields in the picture are related to each other.
- Name the agricultural method in which more than one fields are connected.
- Write any two advantages of this method.

### Activity - 4

Some experiments connected with air pressure and their observations done by students in the Science Club are given below.

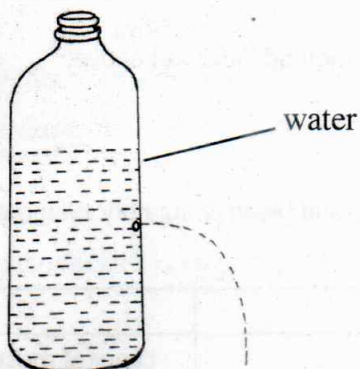
- Find out the reasons and complete the table.

Experiment	Observations	Reasons
Can you blow a paper ball into a bottle?	Paper ball splashes out	i).....
Can you put out the candle flame by blowing air through a funnel?	The candle flame is not put out. The flame comes close to the funnel.	ii).....

- Write the scientific principle behind the reasons.

Observe the picture.

- c) What change should be made in the experiment to make the water come out of the bottle with increased force and at a greater distance? Explain the reason.

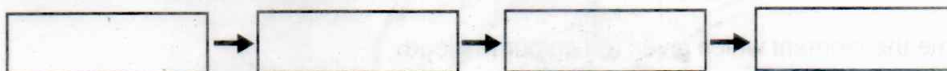


### Activity - 5

Important parts of the respiratory system of human beings are given below.

Nostrils, Bronchi, Lungs, Trachea

- a) Prepare the flow chart showing the path of air during respiration.



- b) Analyse the table given below.

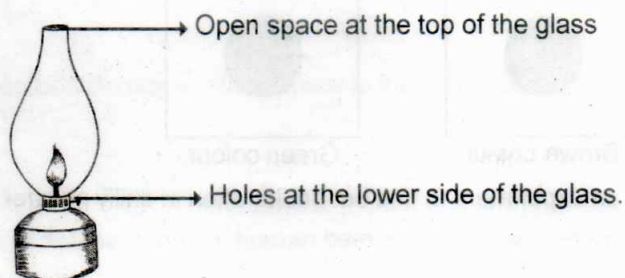
Inhaled air	Quantity	Exhaled air	Quantity
Oxygen	21%	Oxygen	15%
Carbon dioxide	0.04%	Carbon dioxide	4%

What is the reason for the difference in the quantity of oxygen and carbon dioxide in inhaled and exhaled air? Explain.

- c) Name the blood cell which helps in the transportation of oxygen and carbon dioxide.

### Activity 6

Observe the picture of the lantern used in the ancient days.





- a) When we hold our hand on the top of burning lamp, we feel hotter. Why?
- b) What happens when we close the holes on the lower part of the glass?  
Write your conclusion.
- c) Name the heat transmission method indicated above.

**Activity - 7**

- a) Some organs of respiratory and blood circulatory systems and their features are given in the table. Complete the table.

Organ	Feature
i).....	Layer of muscles at the base of the thorax
ii).....	Covered with a double membrane called pericardium.
iii).....	Carry blood to heart
Blood Capillaries	iv).....

- b) Name the pigment which gives red colour to blood.
- c) Write the first aid to be given to a person with a bleeding wound.

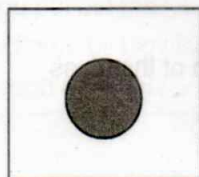
**Activity - 8**

- a) The table consisting of food substances, adulterant and health problems is given below. Complete it.

Food substance	Adulterant	Health Problems
Dal	i).....	ii).....
Tea	Artificial colour	iii).....
Chilly powder	Brick powder	iv).....

- b) Some signs which you see on the packets of food substances are given below. Identify and write the type of food substance indicate by these signs?

Picture - (i)



Brown colour

Picture - (ii)

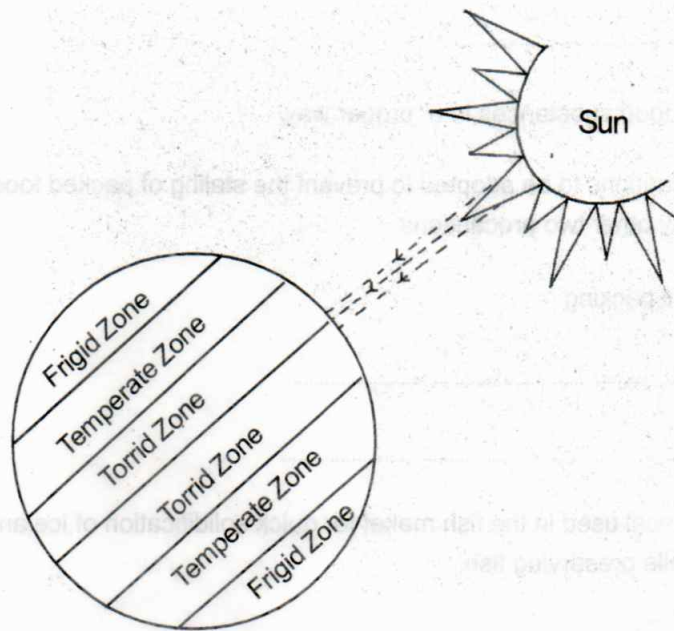


Green colour

- c) Design an experiment to find out adulteration in chilly powder.

### Activity - 9

Observe the picture related with thermal expansion.



The sun rays fall vertically on the equatorial region.

- a) Examine the picture and statement and justify the reason for the flow of wind from South and North to the equatorial region.
- b) Name the heat transmission method by which heat from the Sun reaches the Earth.
- c) How does the wind influence the weather of a region?

### Activity - 10

<b>Food Poison</b> <b>Many people hospitalised</b>
Nearly fifty persons who have taken food from a fast food shop are admitted in the hospital due to vomiting and stomach pain. It is said that it happened because they were given stale food.

Have you read the newspaper report. The presence of microorganisms in food materials is the reason for food poison.

a) One of the criteria suggested by WHO to prevent the growth of microorganisms is given below. Write two more.

i) .....

ii) .....

iii) Cook the food substances in a proper way.

b) One of the precautions to be adopted to prevent the staling of packed food materials is given below. Write any other two precautions.

i) Air tight packing

ii) .....

iii) .....

c) Name the chemical used in the fish market for quick solidification of ice and to obtain low temperature while preserving fish.