

- 15 minutes is given as cool off time.
- Read the questions carefully during this time.
- Attend ANY 8 activities from 10 activities.
- 5 score for each activity.

Activity 1

One end of a PVC pipe is closed and three straws (A, B, C) are fixed in the holes as shown in Figure 1.

A) Fill water in the pipe. Through which hole does water come out with more force?

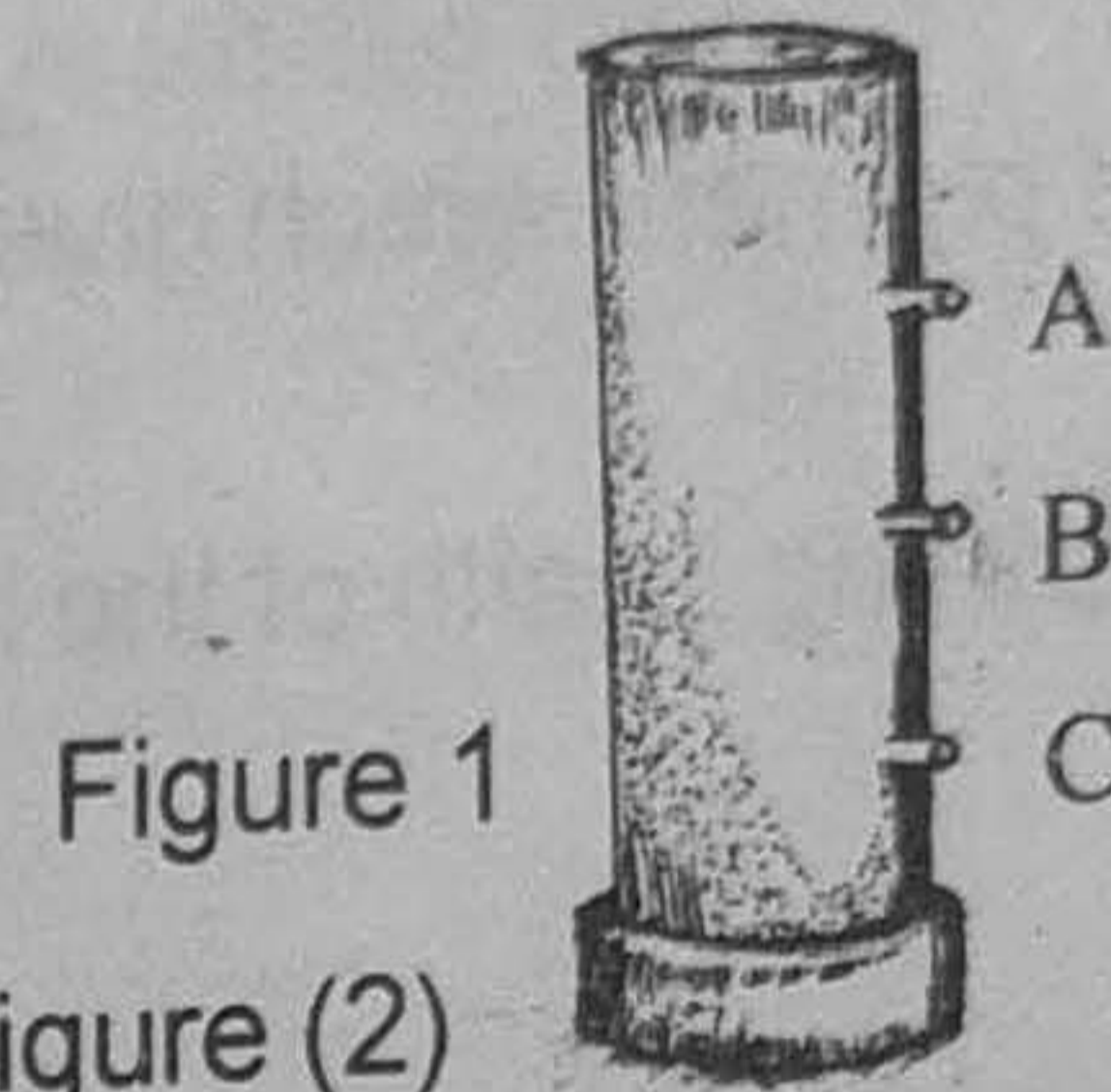


Figure 1

B) If the straws are fixed at equal height as shown in the Figure (2) what change can be seen in the force of the water?

C) What conclusions do you arrive at about liquid pressure from the above activities?

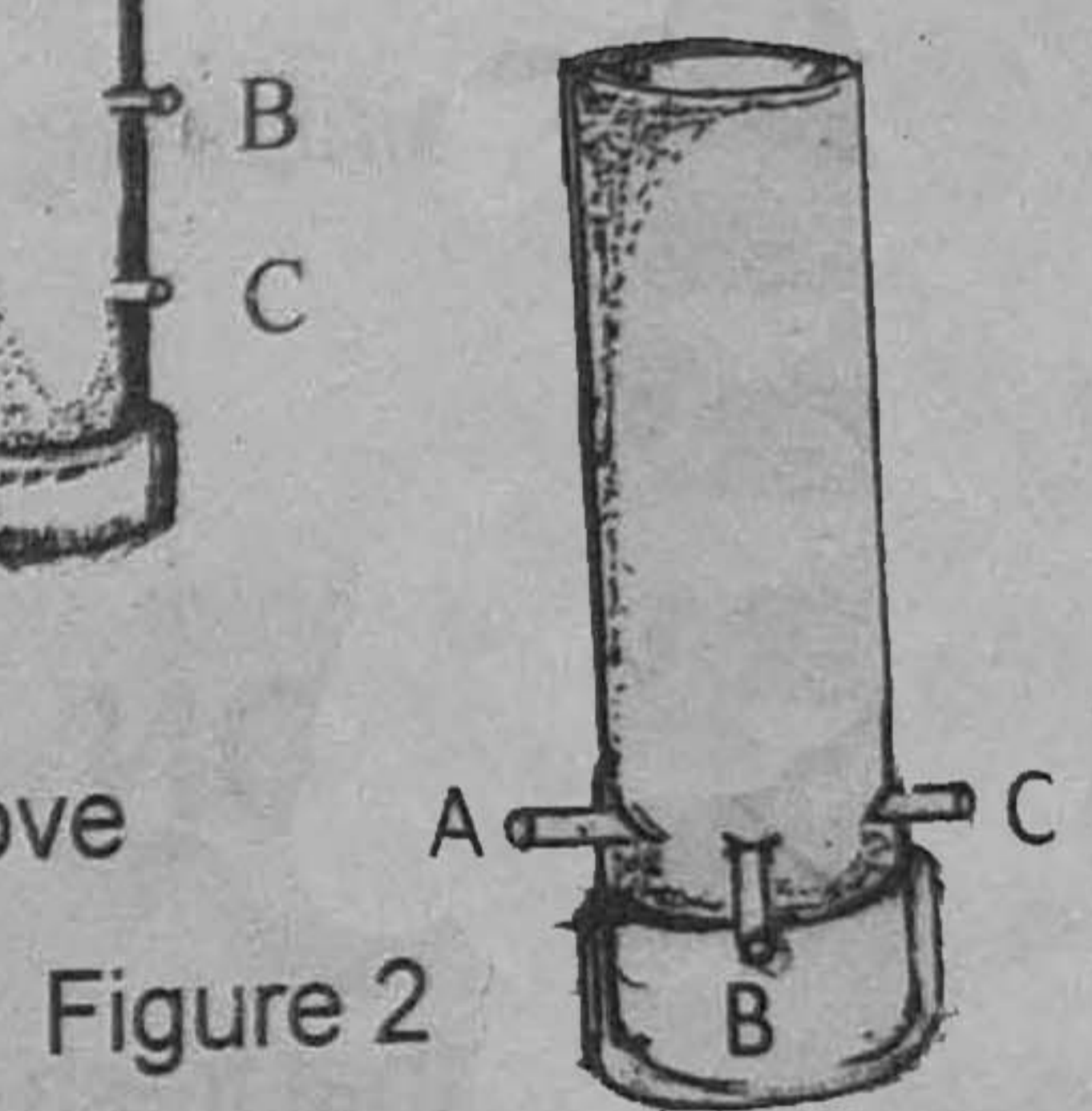


Figure 2

Activity 2

Observe the picture of a branch which is separated from its parent plant after sprouting roots.



- A) Write the name of this method of producing new plantlet.
- B) Write down any two merits of plantlets produced through this method.
- C) The steps of producing new plantlets in this method are given below write them in the correct order.
 - a. Cover with a polythene sheet.
 - b. Cut the branch and plant it in the soil.
 - c. Peel off the bark in a circular shape.
 - d. Select a branch of the plant from which plantlet is to be produced.
 - e. Cover the peeled off part with slightly moistened mixture of coconut fibre and soil.

Activity 3

A) Complete the table below based on the blood circulatory system.

Blood cells	Parts of blood circulatory system
Red blood cells	Heart
(i)	(iii)
(ii)	(iv)

B) Name the pigment which gives red colour to blood.

C) For maintaining health of the heart, we have to follow some health habits. Write any two of them.

Activity 4

You know that fresh milk gets spoilt within a few hours.

A) Why does milk get spoilt?

B) Write an activity you usually do in your home to prevent milk from spoiling easily.

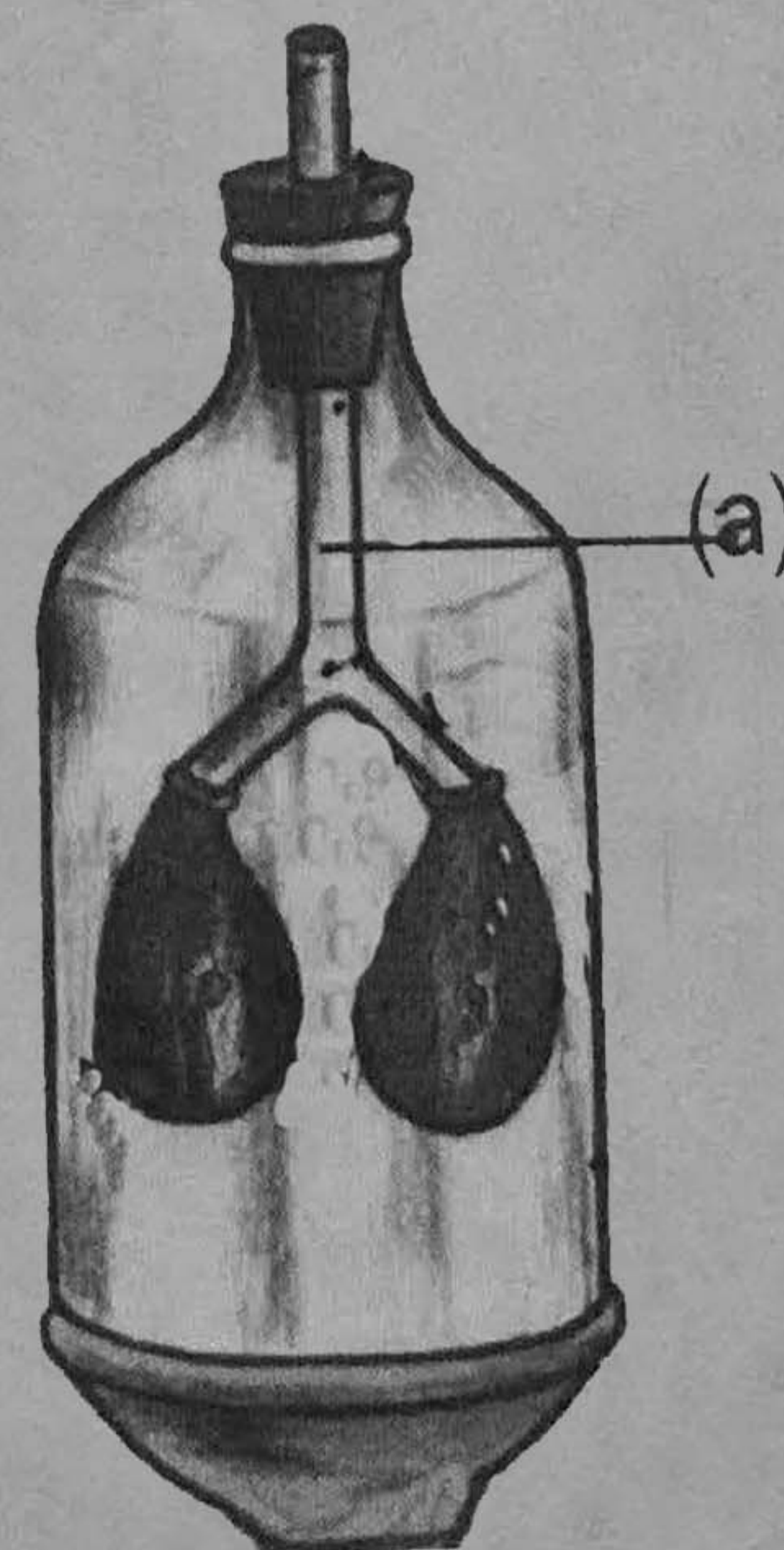
C) Pasteurization is a scientific method to preserve milk. Explain this method.

Activity 5

Observe the picture of a model of human respiratory system.

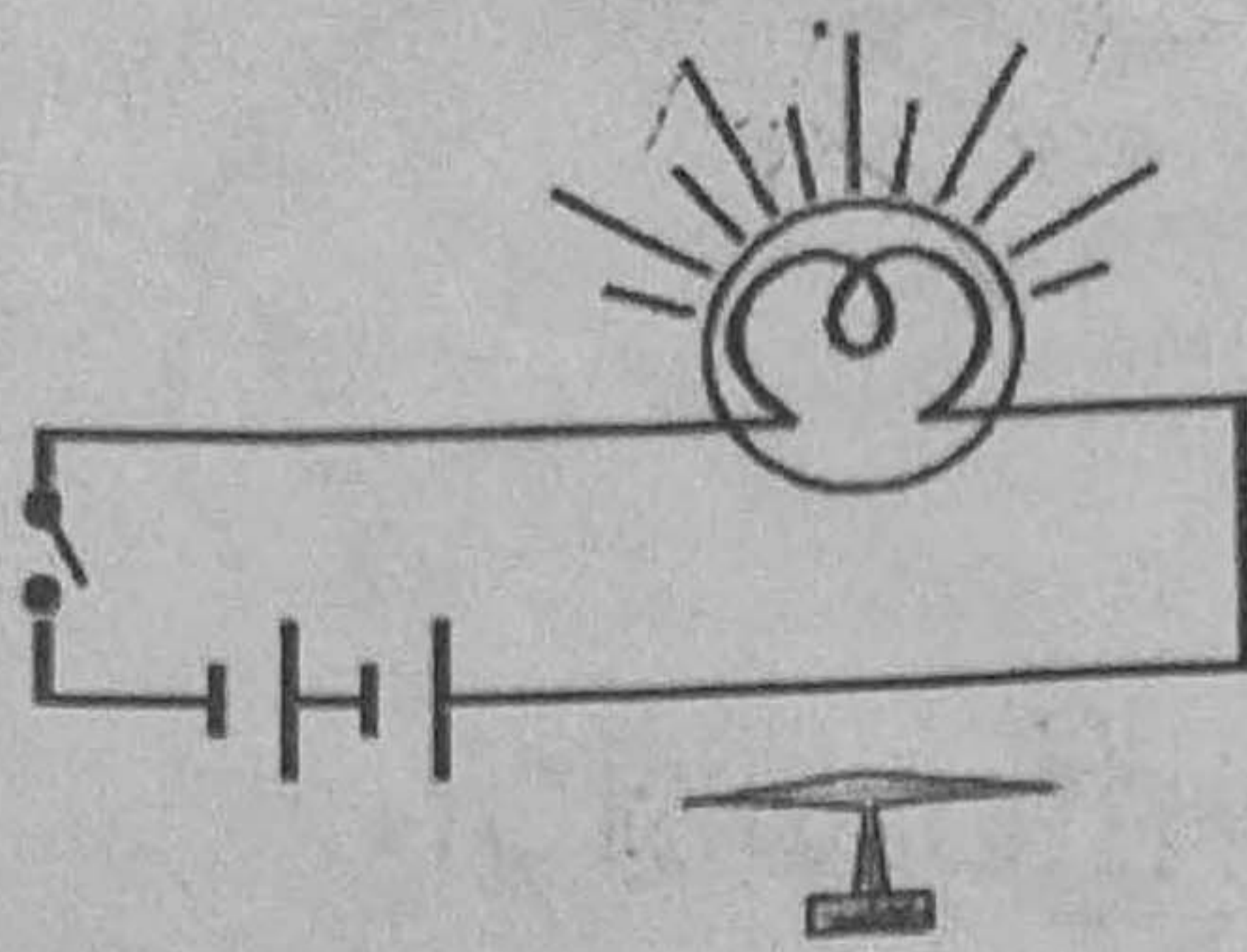
A) Which part of the respiratory system is indicated as 'a' in the picture?

B) Based on the working of this model, explain how does inspiration and expiration take place?



Activity 6

A magnetic needle is placed near an electric circuit as shown in the figure.



- What happens to the magnetic needle when the switch is turned on?
- What is the reason for this? Explain.
- Name any two devices that work on this principle.

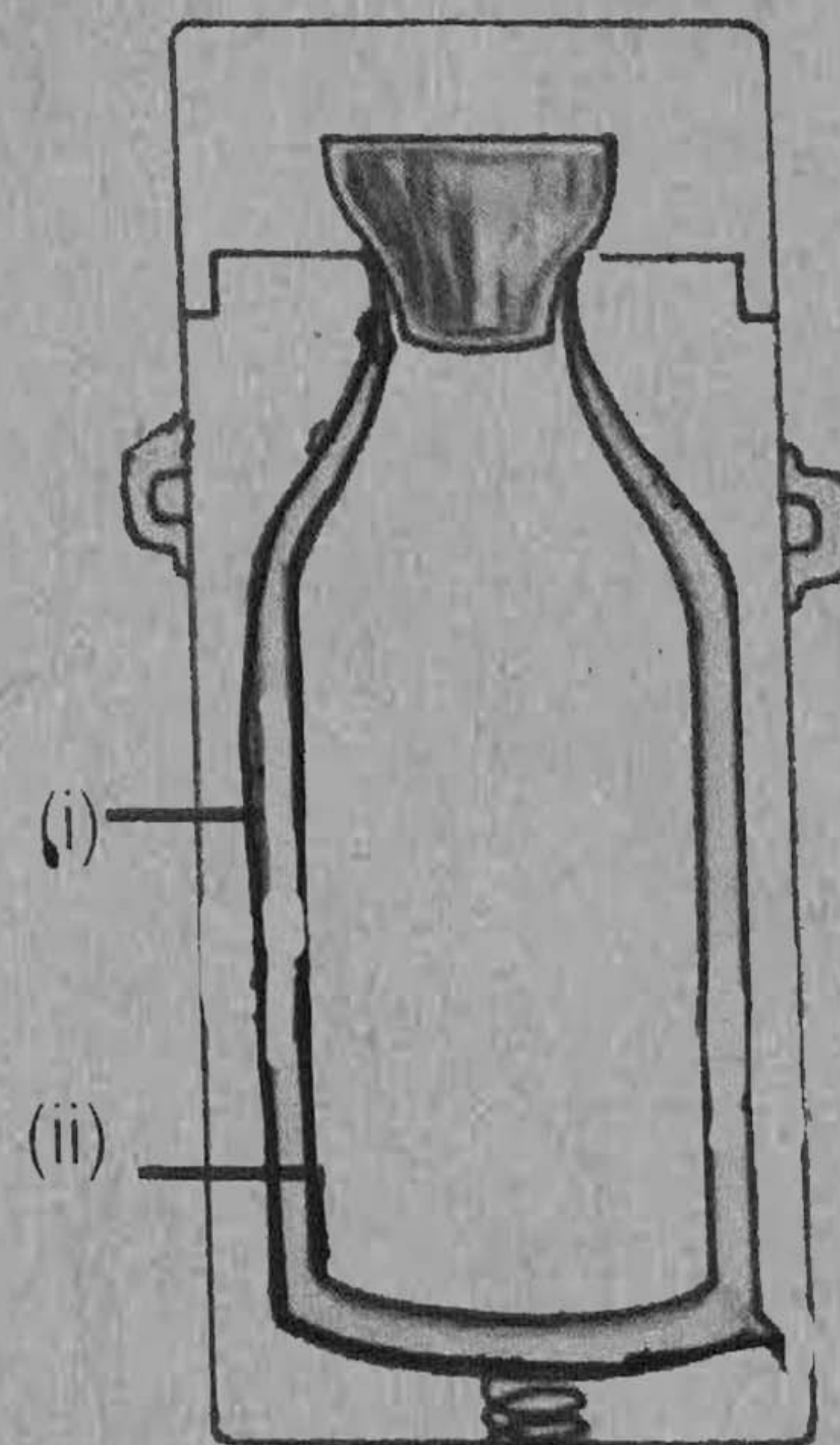
Activity 7

Roy and his mother are making tea. He observes and lists down some of the things that happen when tea is made. Those are given in the table below.

- Complete the table.

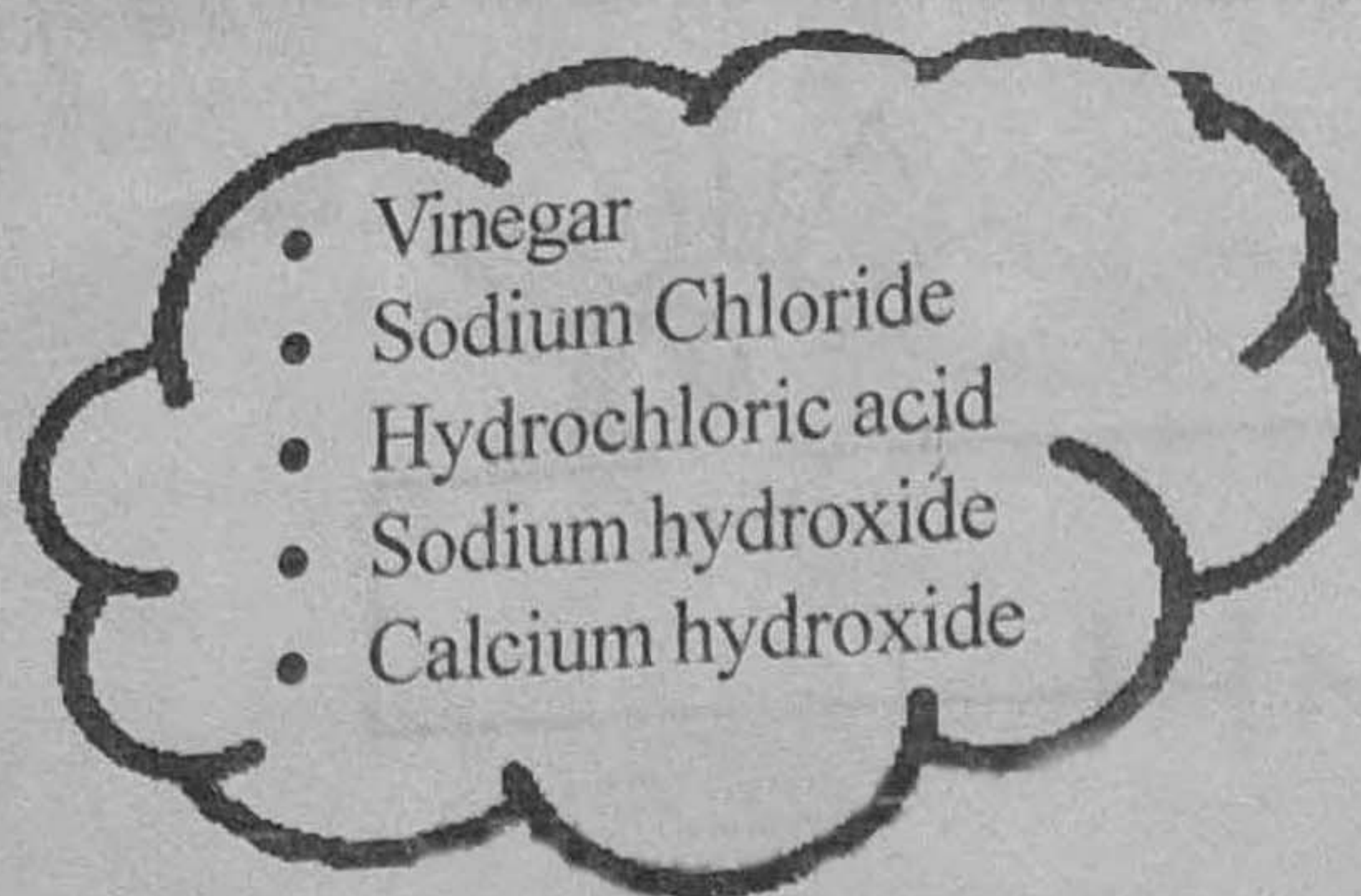
(i).....	(ii).....	Radiation
Water boils.	The pot heats up	(iii).....

- Observe the picture of the thermoflask. Write down how each of the parts marked in the picture help to prevent heat loss.
- Apart from the parts marked in the figure, what are the other arrangements in the thermoflask to prevent heat loss? Write any one.



Activity 8

Observe the list of substances that are collected in the Science Corner.



- A) Which alkali in this list is used to make soap?
- B) Which of the following containers would you choose for making soap?
a) Steel Bucket b) Plastic Bucket.
Give reason for choosing these containers.
- C) Why are sodium silicate and stone powder added while making soap?

Activity 9

Read the news.

Food poisoning: Two people get hospitalised

Thiruvananthapuram: Two people who had their food at the hotel felt vomiting and dizzy. They were immediately shifted to the nearby hospital.

- A) Write two causes of such food poisoning.
- B) Write down three important things to be considered while buying packaged food items.

Activity 10

Fix a balloon at the mouth of an open bottle. This bottle is held upside down and is heated.

- A) What happens to the balloon?
- B) What is the reason for this?
- C) Why are air holes (ventilator) made at the top of the wall in houses?