

Basic Science

Class 7

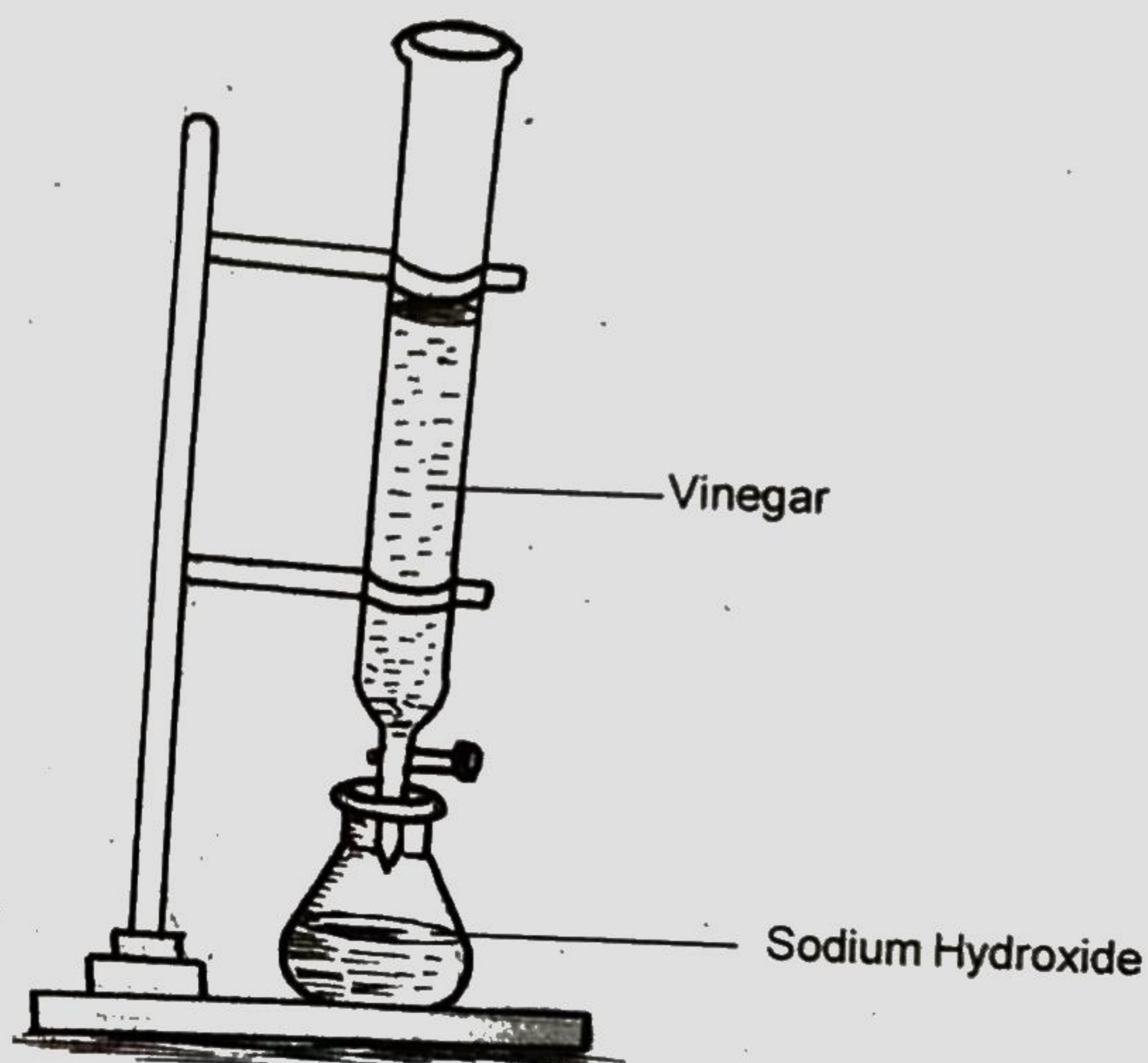
Time : 2 hours

Instructions

1. 15 minutes cool off time is given for reading the questions.
2. Ten activities are given.
3. Answer any eight activities.

Activity 1

Observe the picture.



- A) How can sodium hydroxide solution be neutralised using this experiment?
- B) How do you know that the solution is neutralised?
- C) Write a real life situation in which neutralisation is used.

Activity 2

Some plants are classified in the following tables.

Table A

Autotrophs	Parasites
Jack fruit tree	Loranthus
Mango tree	Sandalwood tree
Gooseberry	Cuscuta

Table B

Autotrophs	Parasites
Rafflesia	Pepper plant
Sandalwood tree	Jasmine
Coconut tree	Cuscuta

- Examine the two tables. Correct the mistakes, if any.
- Write any two features of the soil in which insectivorous plants grow.
- Name an insectivorous plant.

Activity 3

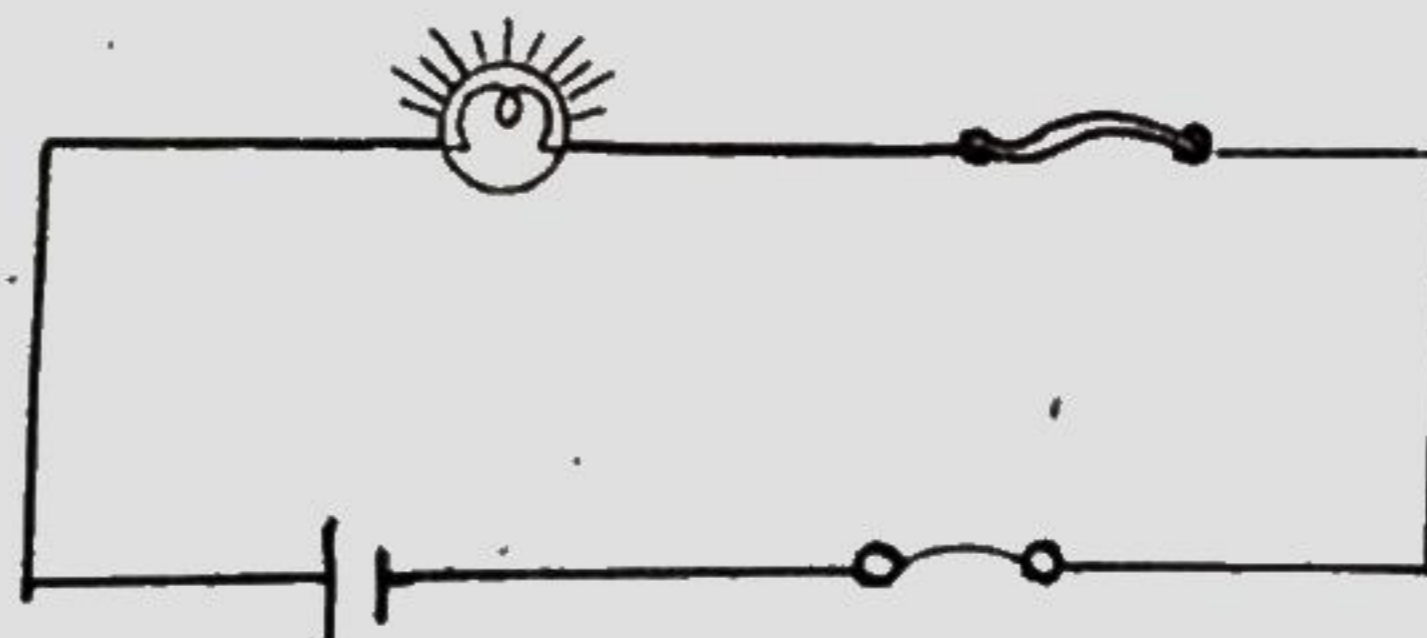
- The incisors of the rat are suitable for gnawing.

Explain how the peculiarities of the teeth of the following animals help them to collect and eat food.

1. Cow	2. Lion
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- Identify the correct statements from the following related to teeth.
 - Permanent teeth are the first teeth that grow in one's life.
 - Enamel is not a hard substance.
 - Health of the teeth depends on food habits.
 - Enamel is the outer most layer of teeth

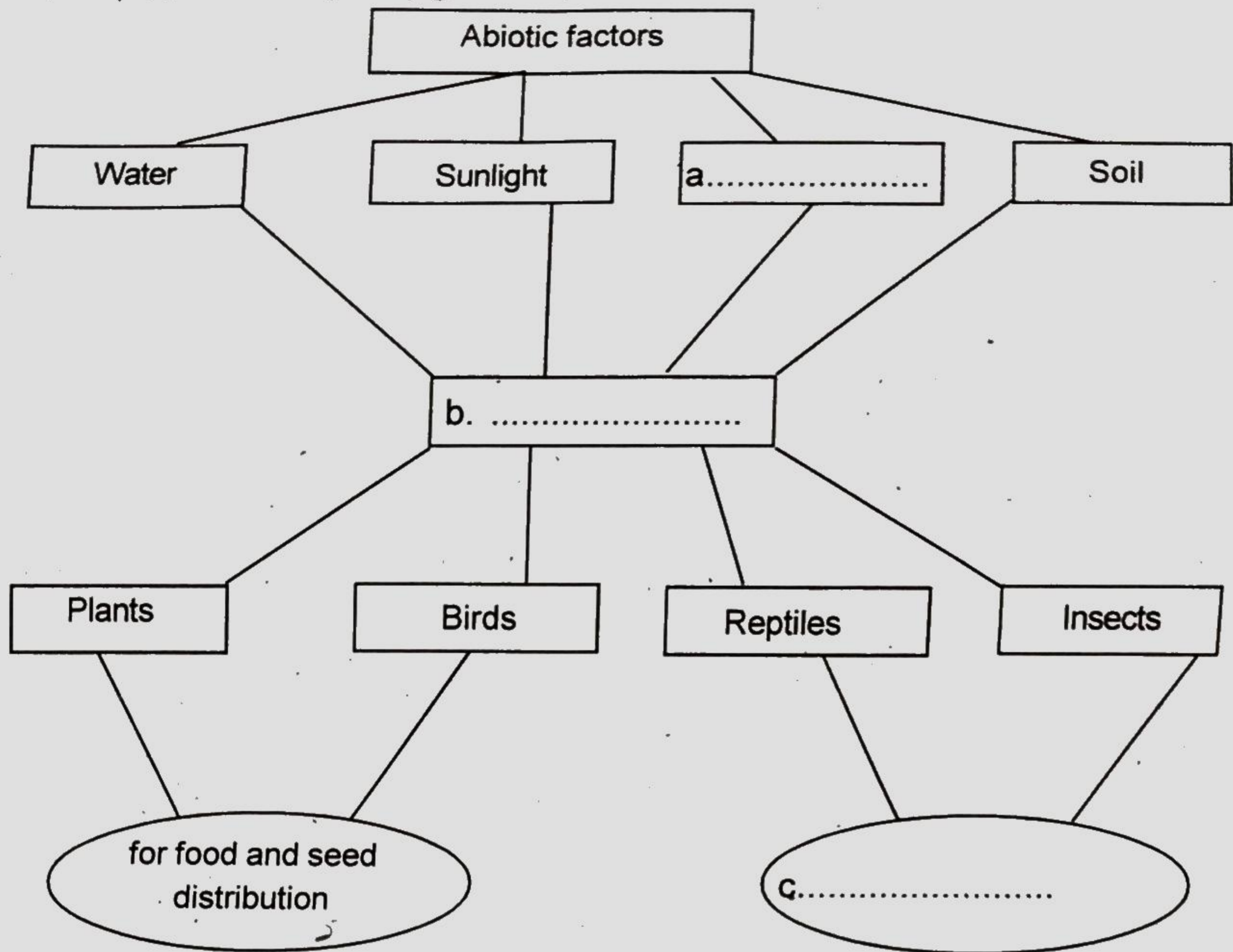
Activity 4



- In the above circuit, when four cells were used instead of one cell, the fuse wire melted. What could be the reason for this?
- What is the purpose of using fuse wire in circuits?
- What are different types of safety fuses?

Activity 5

A) Complete the concept map given below:



B) How do living beings depend on soil and water? Write any two situations.

Activity 6

Observe the picture.

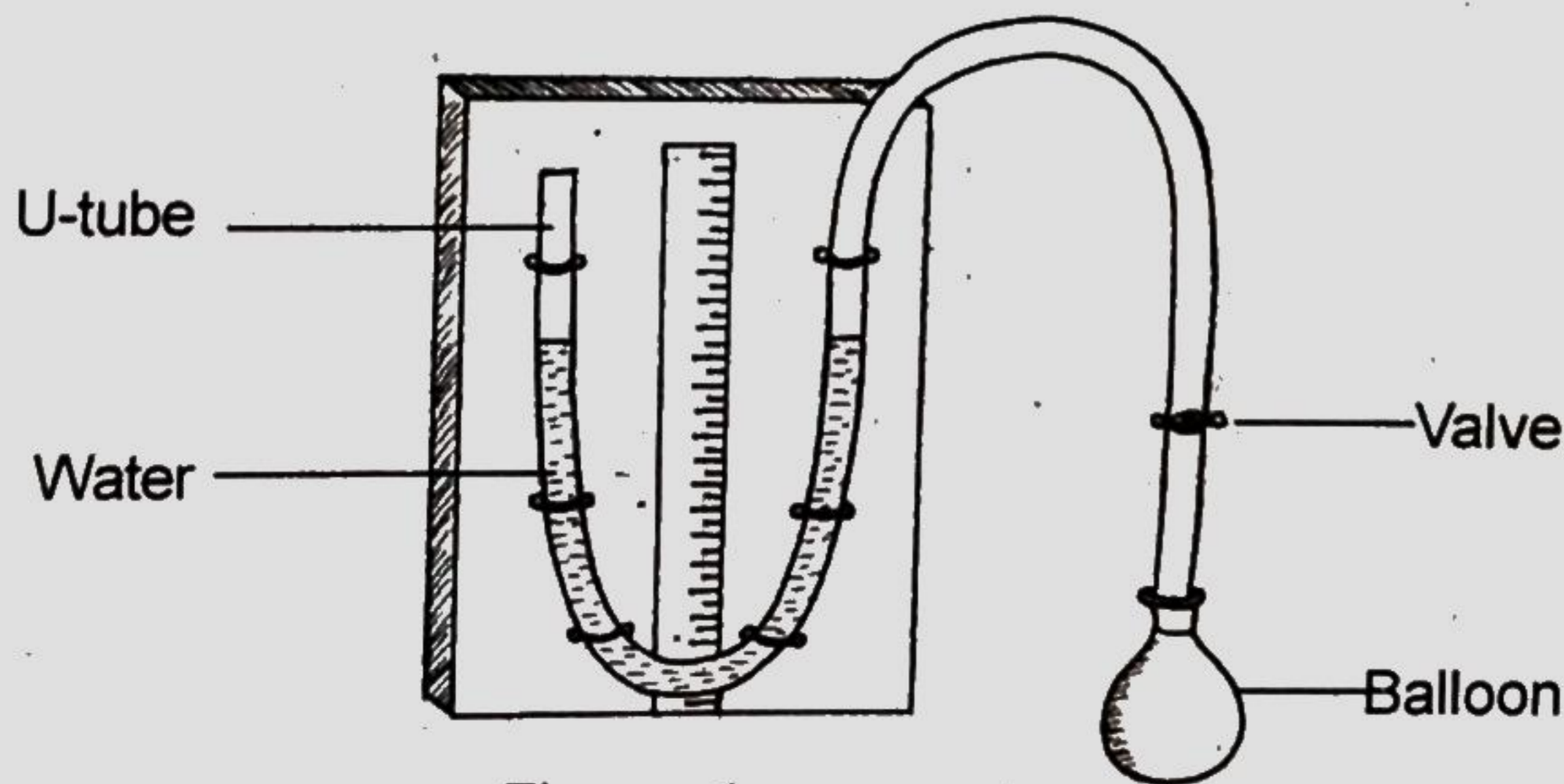
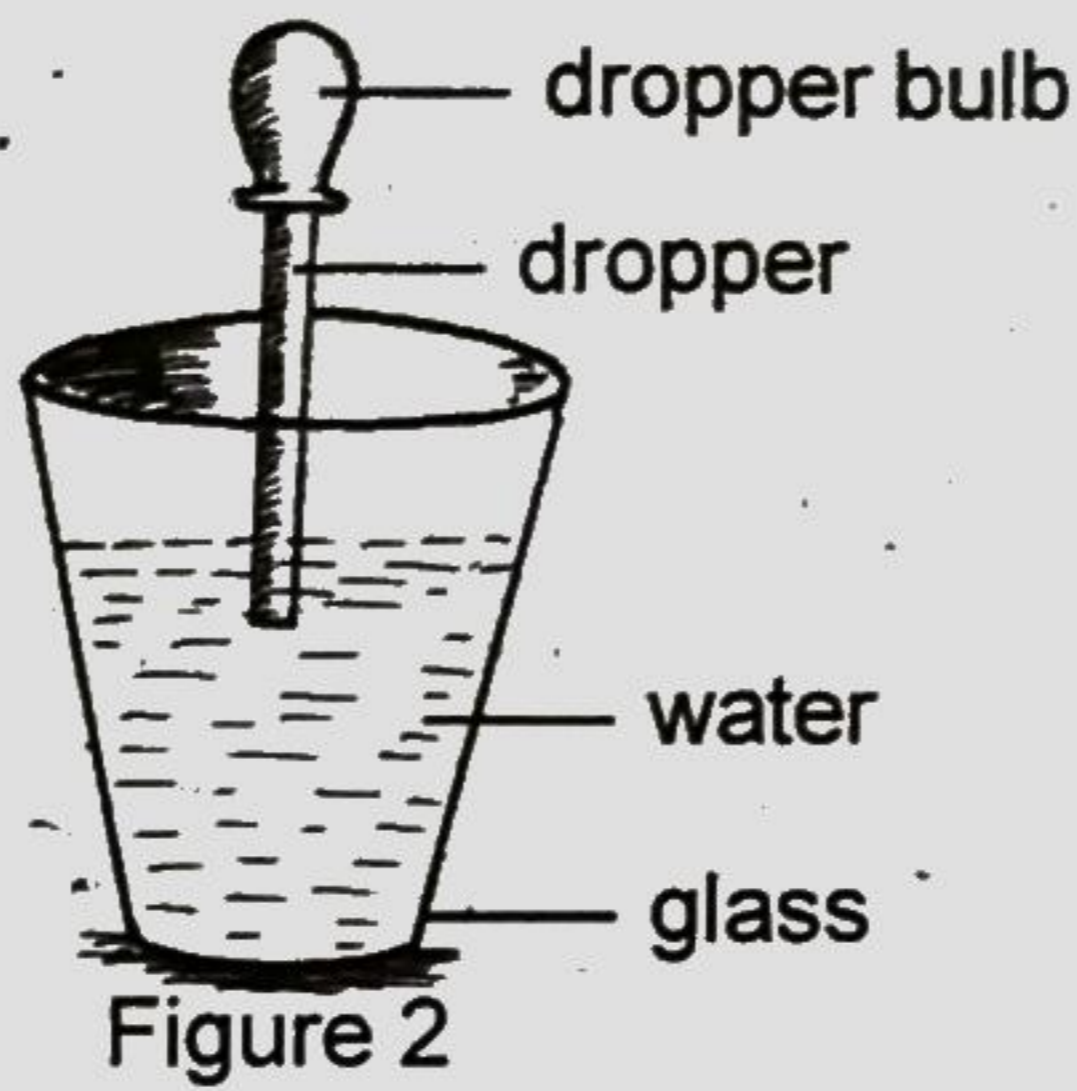


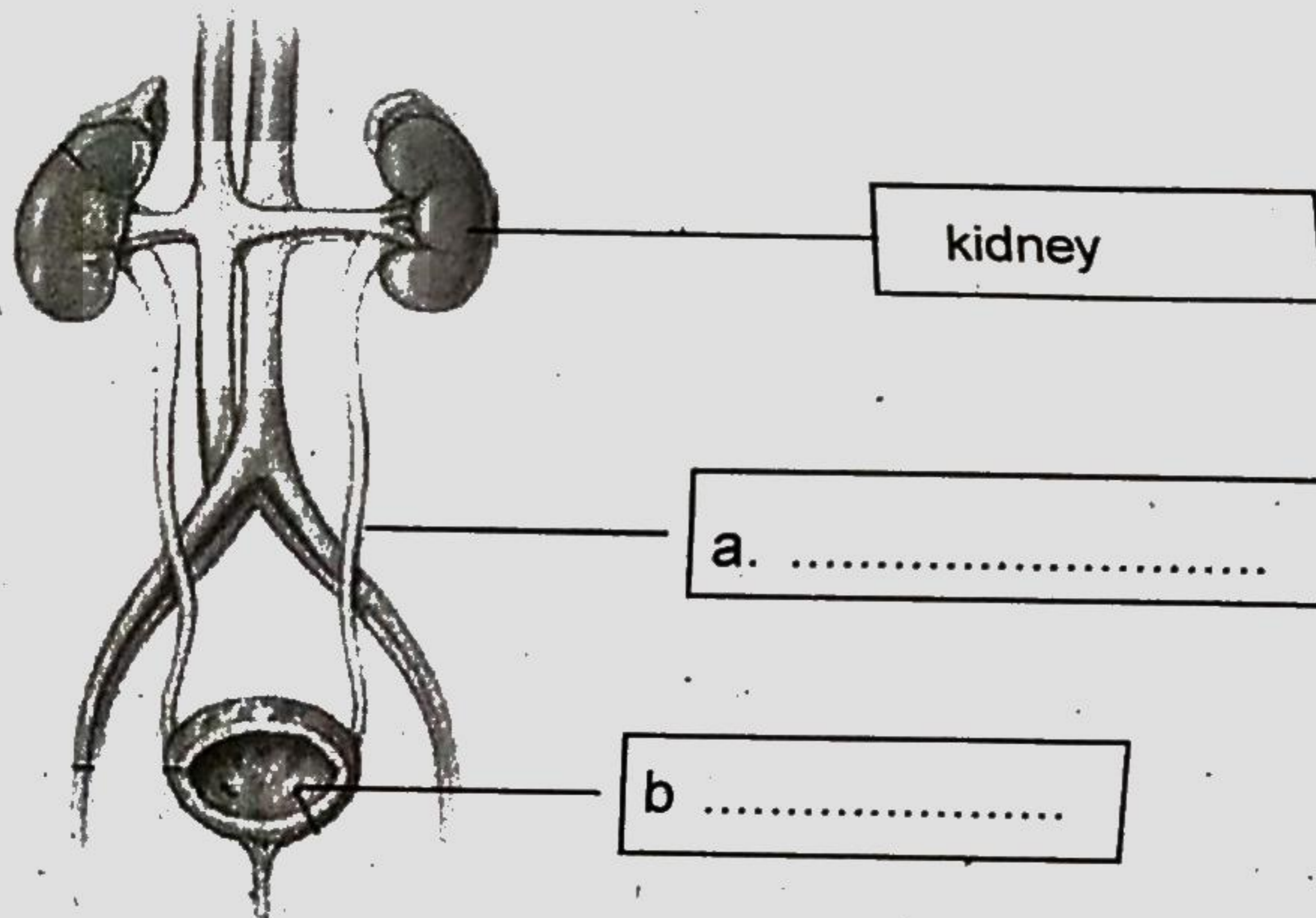
Figure -1

A) What change can we observe when the valve in this arrangement is opened? Why?



- B) When the dropper is dipped in to the glass, the water does not enter the dropper. But, when the dropper bulb is pressed and released, water enters in to it. Why?

Activity 7



- A) Observe the picture and name the parts.
 B) What is the role of kidneys in expelling the impurities from the body?
 C) What are the precautions to be taken to prevent urinary diseases?

Activity 8

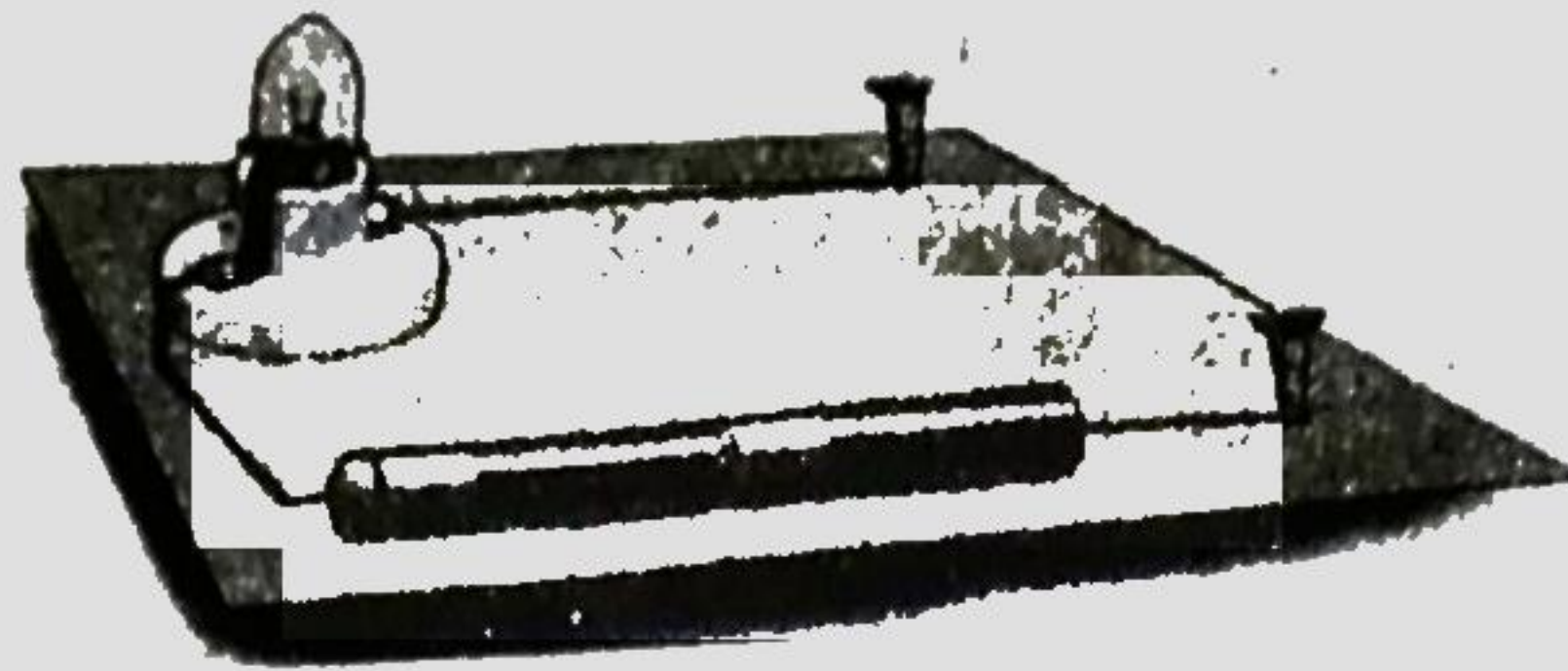
- A) Explain the method of making an electromagnet using insulated copper wire, iron nail and battery.
 B) State the ways of increasing the power of an electromagnet.
 C) Name an equipment in which electromagnet is used.

Activity 9

- A) It was decided to grow a plantation to prevent soil erosion in a slope land. Which tree is more suitable for this purpose? Bamboo or Jack fruit tree. Why?
 B) Write any two methods that can be adopted by the farmers to prevent soil erosion.
 C) Excessive use of chemical fertilisers and pesticides destroys the micro organisms in the top soil. How does it affect the natural structure of the soil?

Activity 10

Observe the picture.



- A) Which among the following can be used to light the bulb in the above arrangement? Why?

Copper wire, Glass, Aluminium wire, Refill, Iron wire, Rolled paper, Pencil graphite.

- B) The symbols used in circuit diagrams are given below. Name them.



- C) Draw the symbols of switch 'on' and 'off' positions.