

Basic Science

Class 7

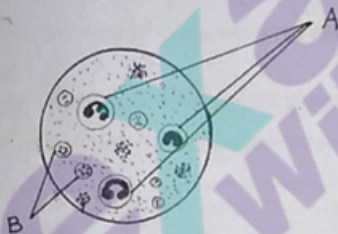
Time : 2 hours

Instructions

1. 15 minutes cooloff time for reading the questions.
2. **TEN** activities are given.
3. Answer any **EIGHT** activities.

Activity 1

The following is the picture of human blood observed through a microscope.



- A) Identify and name A and B.
- B) Which part of blood helps to carry Oxygen?
- C) Examine the given list and find out the statements related to human heart.
- Like sponge
 - There are many air sacs in them
 - Protected inside the thorax by ribs
 - Covered with a double membrane called pericardium
 - Strengthened by 'C' shaped rings of cartilage
 - Has four chambers
 - Size of one's fist

Activity 2

Santhosh reached the seashore with his parents on a sunny day. They enjoyed the cold breeze from the sea.

- Is there a chance for the wind to blow from the sea at night also? Explain.
- Which method of transmission of heat causes such breeze? Explain.
- Name the mode of heat transmission from one place to another without a medium

Activity 3

Read the news report

Food Safety Classes in Schools

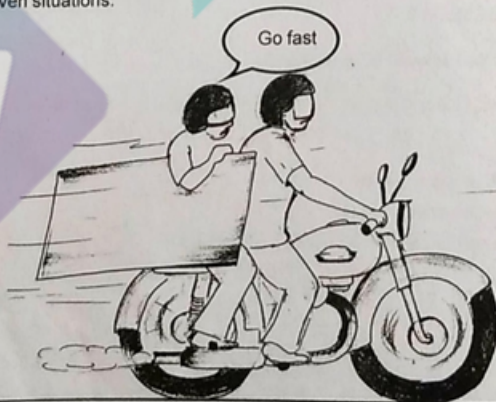
October 16: An awareness class was conducted by the officials of Health Department on food safety to the school noon meal cooks. It was conducted in relation to the World Food Day.

- What may be the different safety measures proposed by him to prevent food borne diseases? (Write any four)
- Name the method of preserving milk. Name the scientist who developed this method.
- Classify the given food items on the basis of the different methods of preservation and prepare a table.

Mango, Grapes, Gooseberry, Chilly pepper

Activity 4

Examine the given situations.





- A) How air pressure is related to this accident? Explain.
- B) Name the scientist who explained this scientific principle.
- C) Write an experiment done in your classroom in connection with this principle.

Activity 5

Examine the given table indicating the peculiarities of the two varieties of plants.

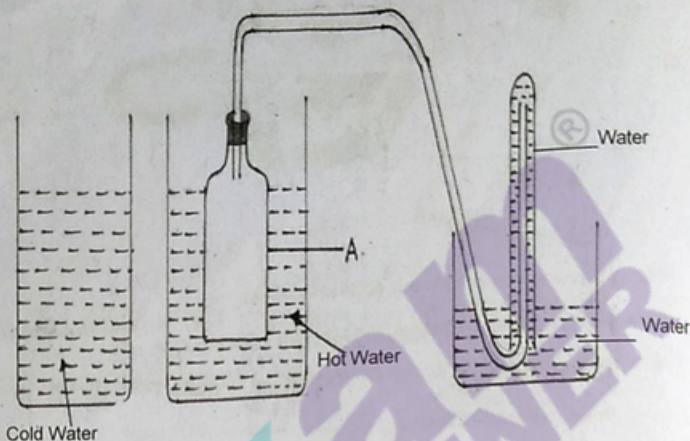
Variety 1	Variety 2
Low yield	High yield
Active growth in our soil	Poor growth in our soil
Long life span	Short life span
Need less nurturing	Need more nurturing

- A) Which variety can be selected as stock and which one as scion to produce good saplings with high yield?
- B) What are the methods adopted to produce good saplings with high yield? Explain any one.
- C) Group the following varieties of seeds suitably.

Annapoorna, Bhagyalakshmi
Anugraha, Anamika,
Jwalamukhi, Kiran
Lola, Hraswa

Activity 6

The given diagram is an activity conducted in connection with thermal expansion.



- What change will happen to the water level in the test tube, when the glass bottle 'A' is placed in the hot water? Explain the reason.
- What change will happen to the water level in the test tube when the glass bottle A is transferred from hot water to cold water? Explain the reason.
- Name a device working on the basis of thermal expansion of liquids.

Activity 7

Chinnu and Minnu had their food while watching cartoon, unfortunately, food entered into the trachea of Chinnu and her breathing got blocked. Chinnu's father gave immediate first aid for her.

- Explain the first aid given by Chinnu's father.
- "All organisms breathe. Some of them have more than one respiratory organ". Is this statement true? Justify.
- Name two organisms which respire through skin.