

## Textbook Exercise

1. To walk through a waterlogged area, you usually shorten the length of your dress by folding it. Can this change be reversed?

Ans. Yes, this change can be reversed easily.

2. You accidentally dropped your favourite toy and broke it. This is a

change you did not want. Can this change be reversed?

Ans. Unfortunately no, this change cannot be reversed.

3. Some changes are listed in the following table. For each change write in the blank column, whether the change can be reversed or not?

S.No.	Change	Can be reversed (Yes/No)
1.	This sawing of a piece of wood.	
2.	The melting of ice candy.	
3.	Dissolving sugar in water.	
4.	The cooking of food.	
5.	The ripening of a mango.	
6.	Souring of milk.	

Ans.

S.No.	Change	Can be reversed (Yes/No)
1.	This sawing of a piece of wood.	No
2.	The melting of ice candy.	Yes
3.	Dissolving sugar in water.	Yes
4.	The cooking of food.	No
5.	The ripening of a mango.	No
6.	Souring of milk.	No

4. A drawing sheet changes when you draw picture on it. Can you reverse the change?

Ans. When we draw a picture with a pencil it can be erased. It seems this change can be reversed. There would be irreversible change in eraser.

If the picture is drawn by colours then colours would make lasting changes in paper. These changes cannot be reversed.

5. Give examples to explain the differences between change that can or cannot be reversed.

Ans. Changes that can be reversed :

- Lighting of a bulb to light a room.
- Switching on a heater.
- Folding a paper.

Changes that cannot be reversed :

- Burning of a candle, a wick of kerosene lamp to light a room.
- Burning of coal, or LPG or Kerosene.
- Cutting or tearing a paper.

6. A thick coating of a paste of Plaster of Paris (POP) is applied over the bandage

on a fractured bone. It becomes hard on drying to keep bone immobilised. Can the change in POP be reversed?

Ans. No, the change occurred in POP can not be reversed. (Water makes changes in basic structure of POP which cannot be changed by drying).

7. A bag of cement lying in the open gets wet due to rain during the night. The next day the sun shines brightly. Do you think changes which have occurred in the cement, could be reversed?

Ans. No, this change cannot be reversed. The powdered cement when mixed with water forms a thick paste and when it is allowed to dry it turns into hard lumps of cement.

### Intext Questions (Paheli Boojho)

1. Paheli wants to know if you have ever seen a blacksmith making some tools. How does a blacksmith change a piece of iron into different tools? A piece of iron is heated till it becomes red hot. It then becomes soft and is beaten into a desired shape. What change has taken place in iron, on being heated?

Ans. Metals like iron expand on heating. They also become comparatively soft on heating and therefore, can be given shapes. They become red hot on heating.

On cooling these melts contract and harden.

2. Boojho has often noticed that road construction workers heat a black material (tar) for repairing a road. He wants to know whether the change caused in tar by heating is reversible?

Ans. Yes, the change is reversible. The solid thick tar melts or becomes thin liquid on heating. It again becomes solid on cooling.

### Exercise

(Based on Student Advisor Textbook)

#### A. Multiple Choice Questions

1. Melting of ice is :

- a periodic change
- a chemical change
- an irreversible change
- None of these