

NCERT solution for Changes around Us

Question 1

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

Answer

Yes, by unfolding the dress we can reverse this change.

Question 2

You accidentally dropped your favorite toy and broke it. This is a change you did not want. Can this change be reversed?

Answer

No, it cannot be reversed. It is an irreversible change.

Question 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.	The 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	

Answer

S. No.	Change	Can be reversed (Yes/ No)
1.	The 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

Question 4

A drawing sheet changes when you draw a picture on it. Can you reverse this change?

Answer

By erasing the drawing, we can undo the change. For example, if we draw with the help of pencil, we can erase the drawing by using an eraser. Then, it is a reversible change.

If we draw using a pen, we cannot erase the drawing. Then this change cannot be reversed.

Question 5

Give examples to explain the difference between changes that can or cannot be reversed.

Answer

Examples of Reversible Changes:

1. Melting of Ice into water. By freezing the water we can obtain ice again.
2. Folding a paper: By unfolding it, we can undo the change.
3. Hot milk to cold milk: By boiling milk, we can make it warm.

Example of Irreversible Changes:

1. Bursting a balloon.

2. Bud to flower
3. Cutting a wood into wood peices

Question 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 the fractured bone immobilized. Can the change in POP be reversed?

Answer

When water is added to POP, it undergoes a chemical change. Its composition changes and is converted into another substance. Since it is a chemical change, it cannot be reversed.

Question 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 the changes, which have occurred in the cement, could be reversed?

Answer

Due to water, cement hardens and its composition changes. Chemical changes, in general, are irreversible changes. Since it is a chemical change which cannot be reversed.