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

**Ans:** Yes, it can be reversed by unfolding the dress.

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

**Ans:** No, this change (breaking of toy) cannot be reversed.

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	

Ans.	1. No	2. Yes
	3. Yes	4. No
	5. No	6. No.

A drawing sheet changes when you draw a picture on it. Can you reverse this change? Ans: No, we cannot get fresh drawing sheet once a picture is drawn on it with paint/oil or water. However, we can reverse the change, if soft pencil is used to draw the picture.

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

**Ans:** Examples of reversible and irreversible changes

Reversible changes	Irreversible changes
Glowing of electric bulb. (It glows when switched on and becomes dark when switched off.)	Burning of paper or wood.  (It gives smoke and ash, which cannot form paper or wood again).
2. Distillation of liquid:  evaporation  tiquid  condensation	Rusting of iron. (Rust cannot be changed into iron again.)
3. Sublimation Solid heat vapour	3. Making of curd from milk.
<ol> <li>Collapsing of mimosa (touch me not) leaves on touching and opening up on removing the finger.</li> </ol>	4. Growth of plants and animals.

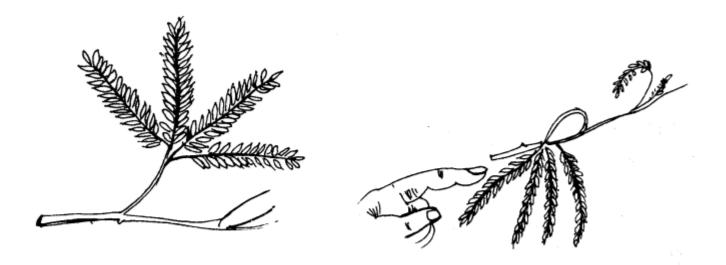


Fig. 6.5 Collapsing and opening up of Mimosa leaves represent a reversible change.

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 immobilised. Can the change in POP be reversed?

Ans: No, the change in POP cannot be reversed since it is a chemical change.

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?

Ans. No, these are irreversible chemical changes.

**Extra Questions** 

## Why does a blacksmith heat the metal rim to fix it on a cart wheel?

**Ans:** A blacksmith heats the metal rim to fix it onto a cart wheel because a metal rim is made slightly smaller. On heating, the rim expands and fits onto the wheel. Then on cooling, the rim contracts and fits tightly onto the wheel.