

<i>Reversible changes</i>	<i>Irreversible changes</i>
1. Glowing of electric bulb. (It glows when switched on and becomes dark when switched off.)	1. Burning of paper or wood. (It gives smoke and ash, which cannot form paper or wood again).
2. Distillation of liquid: Liquid $\xrightleftharpoons[\text{condensation}]{\text{evaporation}}$ Vapour	2. Rusting of iron. (Rust cannot be changed into iron again.)
3. Sublimation Solid $\xrightleftharpoons[\text{cool}]{\text{heat}}$ Vapour	3. Making of curd from milk.
4. Collapsing of mimosa (touch me not) leaves on touching and opening up on removing the finger.	4. Growth of plants and animals.

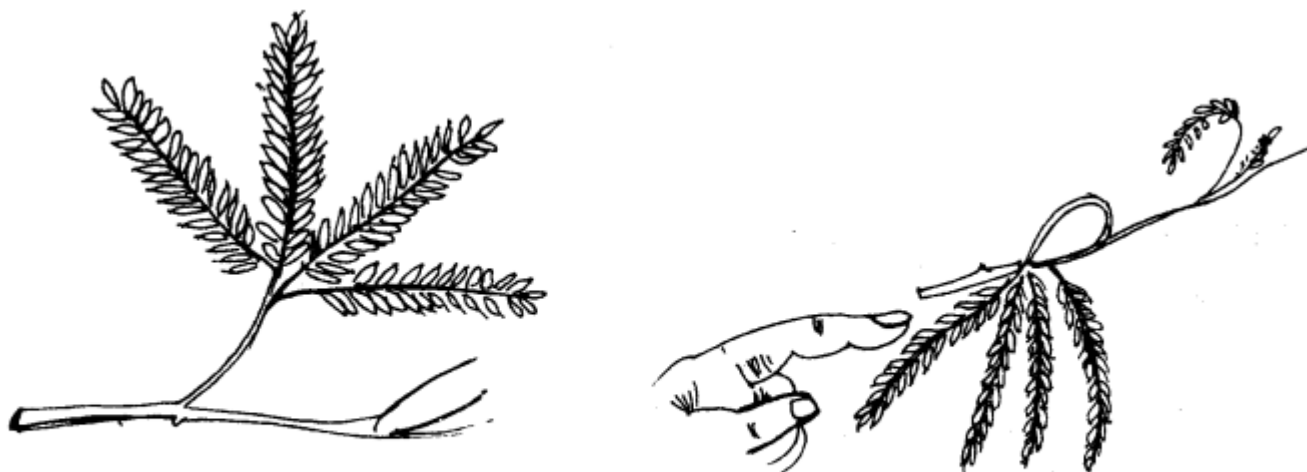


Fig. 6.5 Collapsing and opening up of Mimosa leaves represent a reversible change.

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 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

1. Give two examples of slow changes.

Ans:

- (a) Growing of plants
- (b) Ripening of fruits.

2. Give two examples of fast changes.

Ans:

- (a) Blowing of balloon
- (b) Rolling out roti from dough ball.

3. Give two examples of reversible changes.

Ans:

- (a) Drying of wet clothes
- (b) Heating of milk.

4: Give two examples of irreversible changes.

Ans:

- (a) Milk to cheese
- (b) Cooking of food.

5. 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.