

# Class Notes

Class: VI

Subject: Science

Topic: Changes Around Us  
(To be written in copy)

## NCERT Exercise (to be written in copy)

**Q1.** To walk through a waterlogged area, you usually shorten the length of your dress by folding it. Can this change be reversed?

**Solution:** Yes, this can be reversed by unfolding the dress.

**Q2.** You accidentally dropped your favourite toy and broke it. This is a change you did not want. Can this change be reversed?

**Solution:** No, this change cannot be reversed.

**Q3.** Some changes are listed in the following table. For each change, write in the blank column, whether the change can be reversed or not.

**Solution:**

| Sl 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                     |

**Q4.** A drawing sheet changes when you draw a picture on it. Can you reverse this change?

**Solution:** This change can be reversed if a pencil is used to draw the picture. If a pen, paint, oil /water colours are used to draw the picture, change cannot be reversed.

**Q5.** Give examples to explain the difference between changes that can or cannot be reversed.

**Solution:**

| Reversible Change   | Irreversible Change  |
|---|--|
| A change is reversible if the substance can be brought back to its original form,<br><br>Examples-<br>Melting of ice<br>Boiling of water<br>Opening and closing of door | A change is irreversible if the substance cannot be brought back to its original form,<br><br>Examples –<br>Ripening of fruit<br>Cooking of food<br>Conversion of milk into curd |

**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?**

**Solution:** No, the change cannot be reversed.

**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?**

**Solution:** No, the change cannot be reversed.

#### Extra Questions (to be written in copy)

**Q1. State some of the ways of bringing changes in material around us.**

**Solution:** Some changes around us take place on their own and some changes takes place by applying force, electricity, heat or by mixing two substances.

**Q2. What is the difference between the following changes?**

- a) Melting of wax and burning of wax
- b) Inflating of balloon and bursting of balloon

**Solution:**

| Melting of wax   | Burning of wax  |
|--|---|
| 1, It is a reversible change.<br><br>2. Solid wax melts on heating and becomes solid on cooling. | 1. It is an irreversible change.<br><br>2. Burning of wax produces carbon dioxide and water vapour. |

| Inflating of balloon   | Bursting of balloon   |
|--|---|
| 1 It is a reversible change.<br><br>2. When we blow air, its shape and size changes and when air escapes out it gains its original shape and size. | 1. It is an irreversible change.<br><br>2. When an inflated balloon bursts, it cannot gain its original shape and size. |

**Q3. How can a metal rim be fixed around a wheel of cart?**

**Solution:** The iron rim is made slightly smaller than the wooden wheel, around which it has to be fitted. On heating the rim expands and fits on to the wheel. Cold water is poured over it which causes contraction and rim fits tightly onto wheel.

**Q4. Explain how the iron blade of spade is fixed to a wooden handle.**

**Solution:** The iron blade of spade has a ring in which the wooden handle has to be fixed. The iron ring is slightly smaller in size than the wooden handle. The ring is heated and it becomes slightly bigger in size (due to expansion), now the handle fits easily into the ring. When ring cools down, it contracts and fits tightly to the wooden handle.

**Q5. A piece of iron is heated till it become red hot. It then becomes soft and beaten to a desired shape. What kind of changes are observed in this process; reversible or irreversible?**

**Solution:** The softening of iron on heating to red hot stage is a reversible change. And when the hot iron is cooled, it becomes hard again.

<sup>1</sup> [The above document/content is prepared at home.](#)