

Questions And Answers

Q1. 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 by unfolding the dress again.

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

Ans: 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.

CHANGE	CAN BE REVERSED (YES/NO)
Sawing a piece of wood	–
Melting of ice candy	–
Dissolving sugar in water	–
Cooking food	–
Ripening of a mango	–
Souring of milk	–

Ans:

CHANGE	CAN BE REVERSED (YES/NO)
Sawing a piece of wood	No
Melting of ice candy	Yes
Dissolving sugar in water	Yes
Cooking food	No
Ripening of a mango	No
Souring of milk	No

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

Ans: It depends on what type of materials were used to draw the picture. If the pencil is used to draw the picture then the change can be reversed by erasing the drawing with an eraser. If pen or colours are used to draw the picture then the change cannot be reversed.

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

Ans: Examples are as follows:

Melting of ice cube	Sawing off a piece of wood
Dissolving sugar in water	Cooking food
Inflation of balloon	Ripening of a mango
To roll out a roti from a dough	Burning of incense sticks or wood
Stretching of rubber band	Making paper toys by cutting the paper
Drawing a picture with a pencil	Making paper toys by cutting the paper
Milk changes into curd	Growth of a living being

Q6. A thick coating of Plaster of Paris (POP) paste 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?

Ans: No, the change in Plaster of Paris cannot be reversed.

Q7. 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: The changes cannot be reversed because the cement that hardens up after getting wet cannot be obtained back.

Extra Questions And Answers

Q1. Explain how the wooden handle Of a tool is fixed to the iron blade.

Ans: There is a ring on the iron blade of a tool to fit the wooden handle. This ring is slightly smaller in size than the wooden handle. To fix the handle, the ring is heated

and its size expands and the handle easily fits into the ring. When the ring cools down it contracts and fits tightly onto the handle.

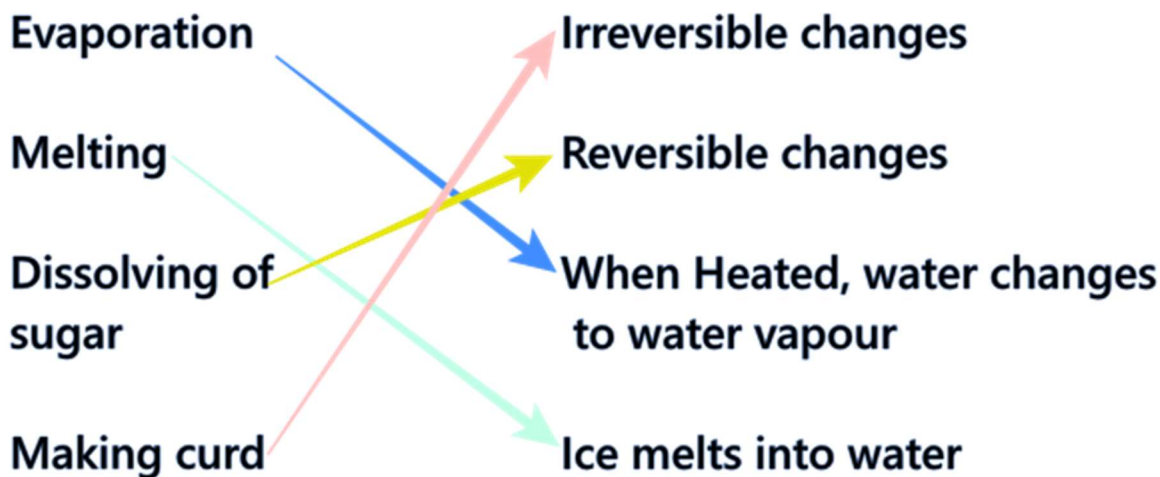
Q2. What are the changes that occur when we burn wood? Is it reversible or irreversible changes?

Ans: Wood changes into ash and gases when burnt. The changes in this case are irreversible changes.

Q3. Match the following

a) Evaporation	i) Irreversible changes
b) Melting	ii) Reversible changes
c) Dissolving of sugar	iii) When Heated, water changes to water vapour
d) Making curd	iv) Ice melts into water.

Ans:



Q4. Differentiate between reversible and irreversible change.

Ans: Reversible changes are changes which can be reversed back to their original form whereas, irreversible changes are permanent changes that cannot be reversed back.

Q5. Name a substance that can change to all three forms of matter: solid, liquid and gas.

Ans: Water.

When water is heated above $100\text{ }^{\circ}\text{C}$ it changes to gas (vapour form), when cooled down at room temperature it changes back to liquid form. When it cools below 0°C , it forms into ice, i.e. solid form.