

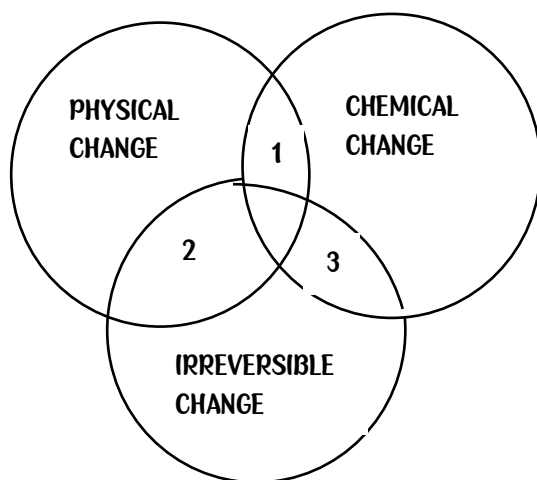
1. A student claims that dissolving salt in water is always a chemical change because "salt disappears." Which response is scientifically correct?

- A. Correct, because disappearance means destruction
- B. Correct, because water changes into salt
- C. Incorrect, because salt can be recovered by evaporating the water
- D. Incorrect, because salt has completely changed into water

2. A piece of iron is heated strongly and then allowed to cool. Another piece of iron is left in moist air for several weeks. Which statement is correct?

- A. Both changes necessarily produce new substances
- B. Heating and cooling is generally physical, while rusting is chemical
- C. Heating is chemical, rusting is physical
- D. Both are physical changes

3.



- A. 1- Baking a cake, 2- Digestion of food, 3- Cutting of paper
- B. 1- Burning a candle, 2- Breaking of an egg shell, 3- Respiration
- C. 1- Rusting of an iron rod, 2- Burning of paper, 3- Spoilt food
- D. 1- Burning of LPG gas in the kitchen, 2- Browning of an apple slice, 3- Curdling of milk

4. Why can a matchstick be safely handled at room temperature but catches fire when struck against the striking surface?

- A. Striking creates enough heating to help the combustible material reach its ignition temperature**
- B. Striking removes oxygen**
- C. Striking converts the matchstick into a non-combustible substance**
- D. The matchstick burns because friction produces water**

5. Assertion: Every irreversible change is a chemical change.

Reason: Some physical changes, such as breaking glass, are also difficult to reverse.

6. Assertion: Solids are generally difficult to compress.

Reason: There are relatively small spaces between their particles.

7. Which of the following is true when milk changes into curd?

- I) Its state is changed from liquid to semi liquid**
- II) It changes colour**
- III) It changes taste**
- IV) The change cannot be reversed**

- A. I) and ii) are correct**
- B. Ii) and iii) are correct**
- C. I),iii), iv) are correct**
- D. All are correct**

Riya was preparing breakfast with her mother. She noticed that a piece of ice melted into water when left on the kitchen table. Her mother then boiled some water, and steam was produced. When the steam came in

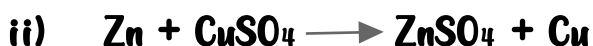
contact with the cooler lid of a vessel, tiny water droplets appeared on the lid. Later, Riya helped her mother heat some butter in a pan. The butter melted into a liquid. After further heating, it became brown and developed a different smell. Riya also noticed that when milk was kept warm and a little curd was added to it, the milk gradually changed into curd. She wondered why some changes could be reversed while others could not.

8. Riya says, *"Since water, ice and steam look different, they must be different substances."* Do you agree? Give a scientific reason for your answer.(1)

9. Suppose the water droplets formed on the lid are collected and cooled further. Would they become a new substance? Explain what would happen and why.(1)

10. Butter first melts and then, on prolonged heating, changes colour and develops a new smell. Explain why these two stages cannot be considered the same type of change.(1)

11. Identify type of chemical reaction.(2)



12. Natural factors such as wind, rain etc. help in the formation of soil from rocks. Is the change physical or chemical and why?(1)

13. Explain the term 'weathering' and "erosion". (2)