

★ Mention 2 examples where both physical and chemical changes occur simultaneously.

A- → Burning of candle

Melting of wax (P)

Burning of wax (C)

→ Cooking of food

Water changes to steam (P)

Raw vegetables get cooked (C)

4) Give reason:-

a) Freezing of water to ice and evaporation of water are physical changes.

A- Both of them are physical changes because no new substance is formed. Their chemical composition is the same. They both have the formula  $H_2O$ .

b) Burning of a candle is both a physical and chemical change.

A- When some of the molten wax drops on the floor, it again solidifies which shows a physical change. The burning of wax to produce  $H_2O$  and  $CO_2$  is a chemical change.

c) Burning of paper is a chemical change.

A- When a piece of paper is burnt, a new substance ash is produced. Even when the burning is stopped, the ash can't be

changed back into paper. This shows that the formation of the ash from paper is a permanent and irreversible <sup>chemical</sup> change.

d) Cutting of a cloth piece is a physical change, though it cannot be reversed.

A- It is a physical change, though it cannot be reversed because no new substance is formed.