

1. a) Ans) When a candle burns, both physical and chemical changes occur.

- Physical Changes: On heating candle wax gets melted. Since it again turns into solid wax on cooling.

- Chemical Changes: The wax near flame burns and gives new substances like carbon dioxide, carbon soot, water vapour, heat and light.

b) Ans) LPG is another example of both physical and chemical change occur. LPG is present in liquid form in the ~~in~~ cylinder. When it comes out of the cylinder, it converts into gases gaseous form which is a physical change. It undergoes chemical change when gas burn in air.

4. Give reason:

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

Ans) Freezing of water means liquid water converting into solid ice. Here only a change in physical state is seen and it is reversible and no new substance is formed hence it is physical change. Even evaporation of water is physical change as it involves change of state and it is reversible change.

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

Ans) Burning of candle melts the wax and hence physical state of wax has changed from solid to liquid. Again the wax combines with the atmosphere oxygen and changes to carbon dioxide, heat and light.

c) Burning of paper is a chemical change.

Ans) The burning of paper is considered as a chemical change as the paper after burning changes into ashes and fumes of gases evolve. On burning paper, the white paper changes into a brownish black colour of ashes.

by evolving some gases.

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

Ans) Cutting of a cloth piece is a physical change because it does not change the chemical composition of cloth and the change is only in the state, size, shape, colour, texture or the smell of some or all of the substances that undergo a physical change.