Board – CBSE	Class –6	Topic- changes around us (question – answer)– als and

Question 1

What are reversible and irreversible changes?

Answer

Reversible and irreversible changes:

Reversible changes: The changes which can be brought back to its original form are known as reversible changes. For example, melting of wax and stretching of a rubber band.

Irreversible changes: The changes in which the matter cannot be brought back to its original state are known as irreversible changes. For example, burning of paper changes it into ash and smoke. Paper cannot be obtained back from ash and smoke.

Question 2

What are the differences between reversible changes and irreversible changes?

Answer

The differences between reversible changes and irreversible changes:

Reversible changes	Irreversible changes
1. A change which can be undone or reversed. 2. It is a temporary change. 3. Melting of wax and folding of a paper are examples of it.	1. A change which cannot be undone or reversed. 2. It is a permanent change. 3. Burning of paper and cooking of food are examples of it.

Question 3

Can you obtain wood from sawdust?

Answer

No, because it is an irreversible change.

Question 4

Can we say that ironing of a cloth is a reversible change? Give reasons.

Answer

Ironing removes the wrinkles of the clothes, which can come back in the same condition. Hence, ironing of a cloth is a reversible change.

Question 5

Can deforestation be considered as a reversible change?

Answer

No, deforestation can't be considered as a reversible change because no same tree can be planted after felling down or cutting.

Question 6

Is printing a reversible or an irreversible change?

Answer

Printing is an irreversible change because we cannot separate and collect the printing ink after printing.

Question 7

Give two examples each of reversible and irreversible changes.

Answer

Reversible changes: Melting of wax and stretching of a rubber band.

Irreversible changes: Burning of a paper and growth of plants.

Question 8

State whether burning of a piece of paper is a reversible or an irreversible change.

Answer

When we burn a piece of paper, it changes into ash and smoke. We cannot combine the ash and smoke to form the original piece of paper. So the burning of a piece of paper is an irreversible change.

Question 9

Classify the following as reversible or irreversible changes:

(i) Growth of a plant

(ii) Ploughing a field,

(iii) Melting of wax

(iv) Falling of rain

(v) Pulling of rubber string

(vi) Breaking of a glass rod

(vii) Cooking of food.

Answer

Reversible changes: (ii), (iii), (v)

Irreversible changes: (i), (iv), (vi), (vii).

Question 10

How does curd set? Is this change reversible?

Answer

A small quantity of curd is added to warm milk. The milk is stirred and is set aside undisturbed for a few hours at a warm place. In a few hours, the milk changes into curd. Curd formed from milk cannot be changed into milk again. So, this is an irreversible change.

Question 11

What are fast and slow changes?

Answer

Fast changes take place over a short duration of time.

Slow changes take a longer duration of time to complete.

Question 12

Define physical and chemical changes. Give examples.

Answer

1. Physical change: Physical change is a temporary change in which chemical composition of the substance does not change and no new substance is formed.

During a physical change, only the physical properties of a substance change.

It is a reversible change. For example, melting of ice, during this change, the water changes from its solid form to liquid form. It can be solidified again.The water remains water in both the cases.

2. Chemical change: A chemical change is a permanent change in which not .

only the physical properties but chemical properties also change. It is an irreversible

change. For example, formation of curd from milk, rusting of iron, etc.

Question 13

Formation of clouds is a physical change. Explain.

Answer

Formation of clouds is a physical change as it is phase transformation cycle of natural water from liquid to gas and then, gas to liquid. Hence, the property of water never changes in cloud form.

Question 14

Explosion of a cracker is a chemical change. Explain.

Answer

Explosion of crackers is a chemical change because the explosive reactants are transformed into gaseous products along with heat and light and thus cannot be reversed.

Hence, it is a chemical change.

Question 15

Give some examples of physical and chemical changes.

Answer

Examples of physical changes:

Folding of a sheet of paper, melting of ice, change of water into steam

Examples of chemical changes: breaking of glass tumbler, dissolution of sugar or salt in water, tearing of a sheet of paper into pieces.