

PHYSICAL CHANGES

1. What kind of change is shown by tearing of paper?

Answer:

Tearing of paper is a physical change although, it cannot be reversed.

2.Melting of wax is a change where a solid changes to liquid state. Give one more such change which you observe in your surroundings.

Answer:

Melting of ice is also a change where solid changes into liquid state

3. Name the gas which turns lime water milky.

Answer:

Carbon dioxide gas (CO₂) turns lime water milky.

4. Give example of a physical change which occurs by the action of heat.

Answer:

Melting of ice to form water is a physical change which occurs by the action of heat.

5. Write the colour of copper sulphate solution obtained when iron nails are dipped in it? Answer:

When iron nails are dipped in copper sulphate solution, then the colour of the solution changes to green.

6. What colour of flame is observed when magnesium ribbon burnt in air.

Answer:

When magnesium is burnt in air then a brilliant white flame is obtained.

7. How can you say that ripening of a fruit is a chemical change? [HOTS] Answer:

Ripening of a fruit is a chemical change because after ripening, a new product with different properties is formed.

8.Is souring of milk a physical change or a chemical change? Why? Answer:

Souring of milk is a chemical change because original substances present in milk lose their nature and identity and form new chemical substances.

9.Complete the following reaction Ca (OH)₂ + CO₂ \rightarrow

Answer:

$$Ca (OH)_2 + CO_2 \longrightarrow CaCO_3 + H_2O$$
Calcium Carbon Calcium Water Carbonate

10. What is the nature of magnesium oxide solution?

Answer:

Magnesium oxide is basic in nature because it turns red litmus solution to blue.

11. Name the process by which common salt is obtained from sea water.

Answer:

The common salt can be obtained by the evaporation of sea water.

12. Name the metal which is used for galvanising iron.

Answer:

Zinc metal is used for galvanising iron.

13. Name the metals which are mixed (alloyed) with iron to make stainless steel. Answer:

Metals like chromium and nickel are mixed (alloyed) with iron to make stainless steel.

14. Suggest two methods to prevent rusting.

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Answer:

The two methods to prevent rusting are

- Painting the iron articles.
- Greasing or oiling the iron articles.
- 15. We should eat freshly cut apple. Why?

Answer:

We should eat freshly cut apple because if we leave the apple after cutting, it starts turn to brownish due to the oxidation of the essential nutrients present in it and its food value decreases.

16. Write word equations for two chemical reactions with the help of materials given. Air, copper sulphate, iron, vinegar, iron oxide, carbon, dioxide, iron sulphate, copper, lime water, water

Answer:(i) Iron + air + water \rightarrow iron oxide

(ii) Copper sulphate + iron \rightarrow iron sulphate + copper
