

CHAPTER 1

1. Which of the following is not a chemical change?

- a) Rusting of iron
- b) Burning of a candle
- c) Melting of ice
- d) Digestion of food

Answer: c

2. The chemical equation for the reaction of zinc with dilute sulphuric acid is:

- a) $\text{Zn} + \text{H}_2\text{SO}_4 \rightarrow \text{ZnSO}_4 + \text{H}_2\text{O}$
- b) $\text{ZnSO}_4 + 2\text{H}_2\text{O} \rightarrow \text{Zn}(\text{OH})_2 + \text{H}_2\text{SO}_4$
- c) $\text{Zn} + 2\text{HCl} \rightarrow \text{ZnCl}_2 + \text{H}_2$
- d) $\text{Zn} + \text{HNO}_3 \rightarrow \text{Zn}(\text{NO}_3)_2 + \text{H}_2\text{O}$

Answer: a

3. Which of the following is not a physical change?

- a) Boiling of water
- b) Dissolving salt in water
- c) Burning of wood
- d) Melting of wax

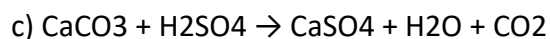
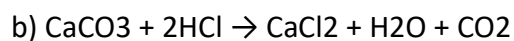
Answer: c

4. The chemical formula of baking soda is:

- a) NaOH
- b) Na_2CO_3
- c) NaHCO_3
- d) NaCl

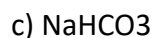
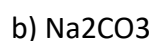
Answer: c

5. The balanced chemical equation for the reaction of calcium carbonate with hydrochloric acid is:



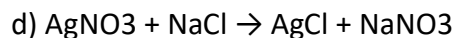
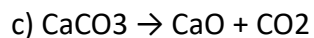
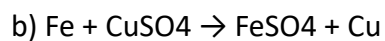
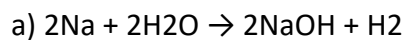
Answer: b

6. The chemical formula of washing soda is:



Answer: b

7. Which of the following is a double displacement reaction?



Answer: d

8. The process of converting a liquid into vapours at any temperature below its boiling point is called:

a) Melting

b) Boiling

c) Evaporation

d) Sublimation

Answer: c

9. The reaction in which a single compound breaks down into two or more simpler substances is called:

a) Combustion reaction

b) Displacement reaction

c) Decomposition reaction

d) Double displacement reaction

Answer: c

10. The balanced chemical equation for the reaction of potassium with water is:

a) $K + H_2O \rightarrow K_2O + H_2$

b) $K + H_2O \rightarrow KOH + H_2$

c) $K_2O + H_2O \rightarrow 2KOH$

d) $K + H_2O \rightarrow KHO + H_2$

Answer: b

11. Which of the following is a combustion reaction?

a) $2H_2 + O_2 \rightarrow 2H_2O$

b) $Fe + CuSO_4 \rightarrow FeSO_4 + Cu$

c) $CH_4 + 2O_2 \rightarrow CO_2 + 2H_2O$

d) $CaCO_3 \rightarrow CaO + CO_2$

Answer: c

12. The chemical formula of plaster of Paris is:

a) $CaSO_4 \cdot 2H_2O$

b) $\text{CaSO}_4 \cdot \text{H}_2\text{O}$

c) CaSO_4

d) CaSO_3

Answer: b

13. Which of the following is not a chemical reaction?

a) Burning of magnesium ribbon in air

b) Digestion of food

c) Rusting of iron

d) Melting of ice

Answer: d

14. The chemical formula of bleaching powder is:

a) $\text{Ca}(\text{OH})_2$

b) CaOCl_2

c) CaCO_3

d) CaSO_4

Answer: b

15. The balanced chemical equation for the reaction of lead nitrate with potassium iodide is:

a) $\text{Pb}(\text{NO}_3)_2 + \text{KI} \rightarrow \text{PbI}_2 + \text{KNO}_3$

b) $\text{Pb}(\text{NO}_3)_2 + \text{KI} \rightarrow \text{Pb}(\text{NO}_3)_2 + \text{KI}$

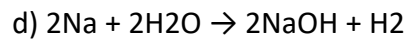
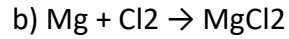
c) $\text{Pb}(\text{NO}_3)_2 + \text{KI} \rightarrow \text{PbSO}_4 + \text{KNO}_3$

d) $\text{Pb}(\text{NO}_3)_2 + \text{KI} \rightarrow \text{PbSO}_4 + \text{KI}$

Answer: a

16. Which of the following is not a redox reaction?

a) $\text{Zn} + \text{CuSO}_4 \rightarrow \text{ZnSO}_4 + \text{Cu}$



Answer: b

17. The process of coating the surface of a metal with a thin layer of another metal by electrolysis is called:

a) Galvanization

b) Electroplating

c) Anodizing

d) Electrolysis

Answer: b

18. The gas used for artificial ripening of fruits is:

a) Carbon dioxide

b) Ethylene

c) Methane

d) Acetylene

Answer: b

19. The chemical name of baking soda is:

a) Sodium bicarbonate

b) Calcium bicarbonate

c) Magnesium bicarbonate

d) Potassium bicarbonate

Answer: a

20. The chemical name of vinegar is:

- a) Acetic acid
- b) Citric acid
- c) Tartaric acid
- d) Lactic acid

Answer: a

21. The gas responsible for the greenhouse effect is:

- a) Nitrogen
- b) Oxygen
- c) Carbon dioxide
- d) Methane

Answer: c

22. The chemical formula of common salt is:

- a) NaCl
- b) KCl
- c) MgCl_2
- d) CaCl_2

Answer: a

23. The chemical formula of washing soda is:

- a) $\text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O}$
- b) NaHCO_3
- c) NaOH
- d) NaCl

Answer: a

24. The chemical formula of quicklime is:

- a) CaO
- b) Ca(OH)_2
- c) CaCO_3
- d) CaSO_4

Answer: a

25. The chemical formula of plaster of Paris is:

- a) $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$
- b) $\text{CaSO}_4 \cdot \text{H}_2\text{O}$
- c) CaSO_4
- d) CaSO_3

Answer: b

26. The process of converting vegetable oils into fats by hydrogenation is called:

- a) Oxidation
- b) Saponification
- c) Esterification
- d) Hydrogenation

Answer: d

27. The process of conversion of sugar into alcohol is called:

- a) Fermentation
- b) Distillation
- c) Crystallization
- d) Vaporization

Answer: a

28. The process of conversion of alcohol into vinegar is called:

- a) Fermentation
- b) Distillation
- c) Crystallization
- d) Acetification

Answer: d

29. The process of removing hardness of water by adding washing soda is called:

- a) Sedimentation
- b) Filtration
- c) Chlorination
- d) Softening

Answer: d

30. The process of preparing alcohol from molasses is called:

- a) Fermentation
- b) Distillation
- c) Crystallization
- d) Hydrolysis

Answer: a