Holiday Homework
Chemistry
Class X
Session -2024 -25

Answer the following questions :-

Q.1) Balance the following chemical equations:

1. $Na + Cl_2 \rightarrow NaCl$
2. $Fe + O2 \rightarrow Fe_2O_3$
3. $H2 + O2 \rightarrow H2O$
4. $Mg + HCl \rightarrow MgCl_2 + H_2$
5. $CaCO_3 \rightarrow CaO + CO_2$

Q2) Identify the type of following reactions:

1. $2Na + Cl_2 \rightarrow 2NaCl$
2. $2KCIO3 \rightarrow 2KCI + 3O_2$
3. $Zn + CuSO_4 \rightarrow ZnSO_4 + Cu$
4. $AgNO3 + NaCl \rightarrow AgCl + NaNO3$
5. $HCl + NaOH \rightarrow NaCl + H_2O$

Q3) Write the chemical formulas for the following compounds:

1. Sodium chloride
2. Calcium carbonate
3. Magnesium oxide
4. Copper sulphate
5. Hydrogen chloride

Q4) Convert the following word equations into balanced chemical equations:

1. Sodium reacts with water to form sodium hydroxide and hydrogen gas.
2. Calcium carbonate decomposes on heating to form calcium oxide and carbon dioxide.

3. Zinc reacts with hydrochloric acid to form zinc chloride and hydrogen gas.