Balanced each equation showing all your work:

1.
$$CaCO_3 \rightarrow CaO + CO_2$$

2.
$$CaO + H_2O \rightarrow Ca(OH)_2$$

3.
$$Ca(OH)_2 + CO_2 \rightarrow CaCO_3 + H_2O$$

4.
$$NaCl + MgSO_4 \rightarrow Na_2SO_4 + MgCl_2$$

5.
$$H_2 + Cl_2 \rightarrow HCl$$

6.
$$Hg + O_2 \rightarrow Hg_2O$$

7. Fe +
$$O_2 \rightarrow Fe_2O_3$$

8. Fe +
$$O_2 \rightarrow FeO$$

9.
$$Mg + HCl \rightarrow MgCl_2 + H_2$$

10. Ca +
$$H_2O \rightarrow Ca(OH)_2 + H_2$$

11. Al +
$$O_2 \rightarrow Al_2O_3$$

12.
$$HCl + F_2 \rightarrow HF + Cl_2$$

13.
$$BaCl_2 + CuSO_4 \rightarrow BaSO_4 + CuCl_2$$

14.
$$H_3PO_4 + NH_4OH \rightarrow (NH_4)_3PO_4 + H_2O$$

15.
$$Al_2O_3 + H_2SO_4 \rightarrow Al_2(SO_4)_3 + H_2O$$

Write the Final Balanced Equations for these Chemical Reactions:

1.
$$NaHCO_3 + H_2SO_4 \rightarrow CO_2 + Na_2SO_4 + H_2O_3$$

2.
$$BH_3 + O_2 \rightarrow B_2O_3 + H_2O$$

3.
$$CH_4 + O_2 \rightarrow CO_2 + H_2O$$

4.
$$AIBr_3 \rightarrow AI + Br_2$$

5.
$$Fe_2O_3 + C \rightarrow Fe + CO$$

6.
$$Al_2O_3 + H_2 \rightarrow Al + H_2O$$

7.
$$P + O_2 \rightarrow P_2O_5$$

8.
$$Fe(NO_3)_3 + K_2CrO_4 \rightarrow Fe_2(CrO_4)_3 + KNO_3$$

9.
$$Zn + HCl \rightarrow ZnCl_2 + H_2$$

10.
$$NH_3 + O_2 \rightarrow NO_2 + H_2O$$

11.
$$NH_4OH + H_3PO_4 \rightarrow (NH_4)_3PO_4 + H_2O$$

12.
$$MnO_2 + HCI \rightarrow MnCl_2 + Cl_2 + H_2O$$

13. Al + HCl
$$\rightarrow$$
 AlCl₃ + H₂

14.
$$CO + I_2O_5 \rightarrow CO_2 + I_2$$

15.
$$Mg + N_2 \rightarrow Mg_3N_2$$

Write the Final Balanced Equations for these chemical reactions:

- 1.Zinc plus hydrogen chloride yields zinc chloride plus hydrogen
- 2. Hydrogen plus chlorine yields hydrogen chloride
- 3. Aluminum plus hydrogen sulphate yields aluminum sulphate plus hydrogen
- 4. Calcium nitrate plus hydrogen chloride yields hydrogen nitrate plus calcium chloride
- 5.Iron plus oxygen yields Iron (II) oxide
- 6.Chromium plus copper (II) sulphate yields chromium (III) sulphate plus copper
- 7.Copper (II) oxide plus hydrogen chloride yields copper (II) chloride plus water
- 8.Sodium plus hydrogen chloride yields sodium chloride plus hydrogen

- 9. Hydrogen plus oxygen yields water
- 10. Magnesium plus oxygen yields magnesium oxide
- 11.Aluminum oxide plus hydrogen chloride yields aluminum chloride plus water
- 12.Iron plus oxygen yields Iron (III) oxide
- 13. Sodium carbonate plus hydrogen chloride yields sodium chloride plus carbon dioxide plus water
- 14.Calcium plus water yields calcium hydroxide plus hydrogen
- 15. Calcium oxide plus water yields calcium hydroxide