Name:_____

Net Ionic Equations: For each of the following:

1. Complete and Balance each reaction.
2. Write out the overall IONIC equation.
3. Write out the NET IONIC equation.
4. Identify the SPECTATOR IONS.

Single Replacement Reactions:

1. $Zn(s) + CuSO_4(aq) \rightarrow ZnSO_4(aq) + Cu(s)$

2. $Cu(s) + 2AgNO_3(aq) \rightarrow Cu(NO_3)_2(aq) + 2Ag(s)$

3. $Sn(s) + 2HCl(aq) \rightarrow SnCl_2(aq) + H_2(g)$

4. $Mg(s) + 2HCl(aq) \rightarrow MgCl_2(aq) + H_2(g)$

5. $Cl_2(g) + 2KBr(aq) \rightarrow 2KCl(aq) + Br_2(l)$

6. $Br_2(l) + 2KI(aq) \rightarrow 2KBr(aq) + I_2(s)$

Metathesis Reactions (Double Replacement):

7. $BaCl_2(aq) + Na_2SO_4(aq) \rightarrow$

8. $KCl(aq) + AgNO_3(aq) \rightarrow$

9. $AgNO_3(aq) + NaOH(aq) \rightarrow$

Acid - Base Reactions:

10. $HCl(aq) + KOH(aq) \rightarrow$

11. $HNO_3(aq) + NaOH(aq) \rightarrow$

Weak Acid - Strong Base:

12. $HNO_2(aq) + NaOH(aq) \rightarrow$

13. $HC_2H_3O_2(aq) + KOH(aq) \rightarrow$

14. $H_2CO_3(aq) + NaOH(aq) \rightarrow$

All Types:

15. $K_3PO_4(aq) + Sr(NO_3)_2 \rightarrow$

16. $AgNO_3(aq) + Pb(NO_3)(aq) \rightarrow$

17. $NaNO_3(aq) + KCl(aq) \rightarrow$