ADVANCED HONORS CHEMISTRY - CHAPTER 11 **NAME:**
CHEMICAL REACTIONS **DATE:**
BALANCING EQUATIONS WORKSHEET - V10 **PAGE:**

I. Write and Balance the Following Equations

1. $Ca(AlO_2)_2 + HCl \rightarrow AlCl_3 + CaCl_2 + H_2O$

2. $CeO_2 + KI + HCl \rightarrow KCl + CeCl_3 + H_2O + I_2$

3. $Ho + H_2O \rightarrow Ho(OH)_3 + H_2$

4. $IrCl_3 + NaOH \rightarrow Ir_2O_3 + HCl + NaCl$

5. $MoO_3 + Zn + H_2SO_4 \rightarrow Mo_2O_3 + ZnSO_4 + H_2O$

6. $Cu + H_2SO_4 \rightarrow CuSO_4 + SO_2 + H_2O$

7. $(NH_4)_2SO_4 + KOH \rightarrow K_2SO_4 + NH_3 + H_2O$

8. ferric sulfide + oxygen gas → ferric oxide + sulfur dioxide

9. ammonia + oxygen gas → nitrogen monoxide + water

10. calcium hydroxide + nitrous acid → calcium nitrite + water

11. aluminum + plumbous nitrate → aluminum nitrate + lead

12. methane + oxygen gas $\xrightarrow{\Delta}$ carbon dioxide + water vapor

13. aluminum nitrate + sulfuric acid → aluminum sulfate + nitric acid

14. iron + hydrochloric acid → ferric chloride + hydrogen

15. phosphoric acid + magnesium hydroxide → magnesium phosphate + water

16. ferric bromide + ammonium sulfide → ferric sulfide + ammonium bromide

17. benzene (C_6H_6) + oxygen gas $\xrightarrow{\Delta}$ carbon dioxide + water vapor