

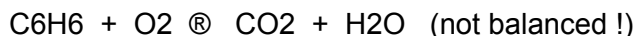
## Stoichiometry - Mass/Mass Problems

1. If 33.0 grams of aluminum reacts with an excess of copper (II) chloride, what amount of pure copper will be produced?

aluminum + copper (II) chloride ® aluminum chloride + copper



2. If 5.00 grams of benzene (C<sub>6</sub>H<sub>6</sub>) is burned completely in oxygen, what mass of water will be produced?



3. What mass of silver nitrate will be needed to react with 125 grams of magnesium chloride?



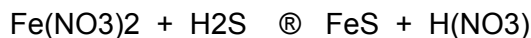
4. What mass of Iron (III) acetate will be produced when 1.50 grams of iron reacts in acetic acid?



5. If 25.00 grams of ammonium phosphate reacts with some magnesium hydroxide, what mass of water and ammonia will be produced? (equation is not balanced!!!!)



6. If 5.04 grams of iron (II) nitrates reacts with an excess of H<sub>2</sub>S, what amount of iron (II) sulfide will be produced?



7. If 122.6 grams of chromium reacts with an excess of copper (II) chloride, what amount of Chromium (III) chloride will be produced?

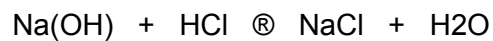
chromium + copper (II) chloride ® chromium (III) chloride + copper



8. If 86.33 grams of sodium reacts with an excess of chlorine, what amount of Salt (sodium chloride) will be produced?



9. What mass of sodium hydroxide "Na(OH)" is needed to react with 22.8 grams of hydrochloric acid "HCl"?



10. If you react .994 grams of iron (III) oxide with aluminum, what mass of iron (Fe) will be produced?

