Homework test 3

Know the names and symbols for the first 54 elements

Chapter 5.

Problems: 43, 45, 51, 53, 57, 59, 61, 63, 65, 73, 79, 80, 81, 91, 93, 95, 97, 99, 101, 103

Extra Problems:

1. What are the products, include the phases(s, g, 1, aq) and balance the equation:

$$CuCl_{2(aq)} + KOH_{(aq)} \rightarrow$$

2. Write the total ionic and net ionic equations for the following molecular equation: molecular:

$$\label{eq:K2CO3(aq) + 2 HCl(aq) } \rightarrow \ 2KCl_{\mbox{\scriptsize (aq)}} \ + H_2O_{\mbox{\scriptsize (l)}} + CO_{\mbox{\scriptsize 2(g)}}$$

3. Please balance the following equation.

$$\underline{}_{C_8}$$
H₁₈ + $\underline{}_{O_2}$ --> $\underline{}_{CO_2}$ + $\underline{}_{H_2}$ O

4. Consider the reaction:

$$N_2 + 3H_2 --> 2NH_3$$

How many grams of NH_3 are produced from the reaction of 5.40 g of H_2 ? (Assume hydrogen is the limiting reagent

Chapter 7

Problems 37, 39, 43, 47, 49, 51, 53, 55, 57, 9, 61, 65, 67, 69, 71, 73, 77, 78, 81, 83, 87, 89, 97, 98, 105

Extra Problems:

- 1. Which molecule has the strongest intermolecular interaction: CO, HF, Cl₂?
 - 2. Consider O2, HCl, H₂O₂. Rank these molecules in order of boiling point from highest to lowest.
 - 3. Please fill in the appropriate circles and label the arrows

