**Oxford High School**

**Chemistry**

**Chapter 1-11 Cumulative Review**

**Set B**

1. Balance the following equations
2. V2O5 + H2 → V2O3 + H2O
3. (NH4)2Cr2O7 → Cr2O3 + N2 + H2O
4. NH3 + O2 → NO + H2O
5. What is the density of Kr gas at STP?
6. Hydrogen reacts with ethane (C2H4) to form ethane (C2H6)

C2H4 + H2 → C2H6

1. What is the limiting reactant when 40.g of C2H4 reacts with 3.0 g of H2?
2. What type of equation is this?
3. How many moles are there in each substance?
4. 888g of sulfur dioxide
5. 2.84 x 1022 molecules of ammonia (NH3)
6. 0.47 L of carbon dioxide at STP
7. Perchloric acid is formed by the reaction of water with dichlorine heptoxide

Cl2O7 + H2O → HClO4

1. What type of reaction is this?
2. How many grams of Cl2O7 must be reacted with an excess of H2O to form 56.2 g of HClO4?
3. How many mL of water are needed to form 3.40 mol of HClO4?
4. Balance and Identify the following equations
5. Pb(NO3)2 + K2CrO4 → PbCrO4 + KNO3
6. Cl2 + KI → KCl + I2
7. C3H6 + O2 → CO2 + H20
8. Al(OH)3 → Al2O3 + H2O
9. How many protons, neutrons, and electrons are in each isotope?
10. Zirconium-90
11. Palladium-108
12. Bromine-81
13. Antimony-123
14. Name the following compounds
15. Fe(OH)3 B. NH4I C. Na2CO3 D. CCl4
16. Write the formulas for the following
17. Potassium nitrate B. copper (II) oxide C. magnesium nitride D. silver fluoride