Chapter 9 Stoichiometry Worksheet A Name _____

Balance the Equation:

1. _____ NaOH + _____O_2 → _____ Na_2O_2 + _____ H_2O
2. _____$CsClO_3$ → _____CsCl + _____ O_2
3. _____ZnO_2 + _____ C + _____F_2 → _____ ZnF_4 + _____CO
4. _____ HBr + _____ LiOH → _____ H_2O + _____ LiBr
5. _____ AlI_3 + _____CI_4→ _____Al_4C_3+ _____ I_2

Balance each equation & solve the problem (Show work)

6. _____ BiS_2 + _____ O_2 → _____ Bi_2O_4 + _____ SO_2
   When 2.73 g of BiS_2 react, what volume of SO_2 gas forms at STP?

7. _____ Ni + _____H_2SO_4 → _____ $NiSO_4$ + _____ H_2
   If 0.2950 g of Ni react with sulfuric acid (H_2SO_4), what volume of H_2 gas forms at STP?

8. _____ CH_4 + _____ O_2 → _____ CO_2 + _____ H_2O
   When 10.00 L of CH_4 gas react, _____ L of O_2 gas are needed at STP for a complete reaction to occur?

9. _____C_8H_{18} + _____ O_2 → _____CO_2 + _____ H_2O
   When 100.0 g of octane burn (C_8H_{18}), what mass of CO_2 is formed?

10. _____K_2CrO_4 + _____ $Pb(NO_3)_2$ → _____ $PbCrO_4$ + _____ KNO_3
    When 5.82 g of K_2CrO_4 react, what mass of $PbCrO_4$ can form?