

MINOH
CHO

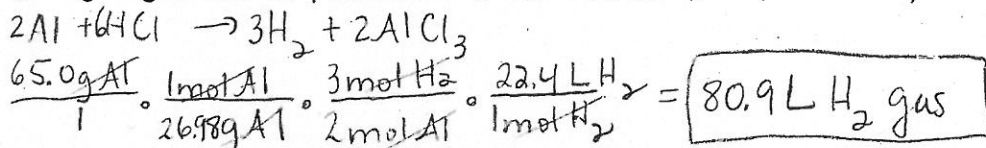
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Name STURMAN KEY
Period _____ Date _____

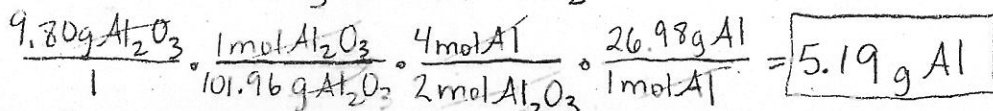
Stoichiometry Test Extra Practice.

*Show work for full credit. Answers should be rounded to the correct #SF, include units and compound or element.

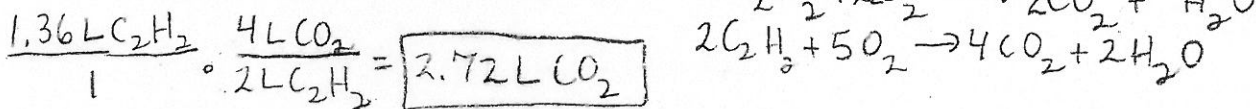
- (+4) 1. If 65.0 g of aluminum reacts with enough hydrochloric acid, what volume of hydrogen gas will be produced? (Assume STP)



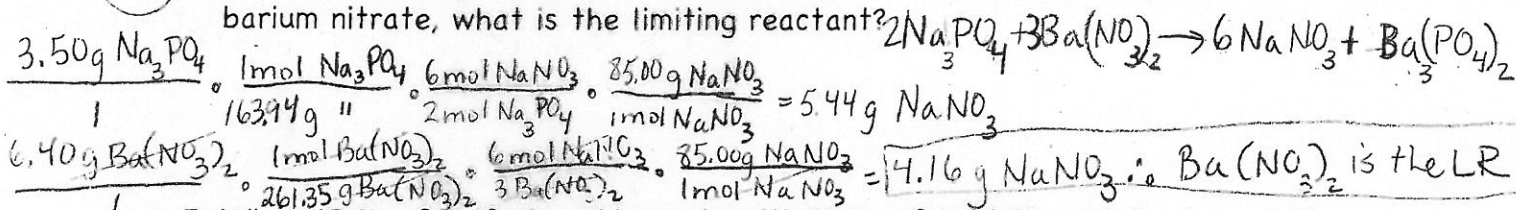
- (+4) 2. When 9.80g of Al_2O_3 decomposes, how many grams of aluminum metal is produced?



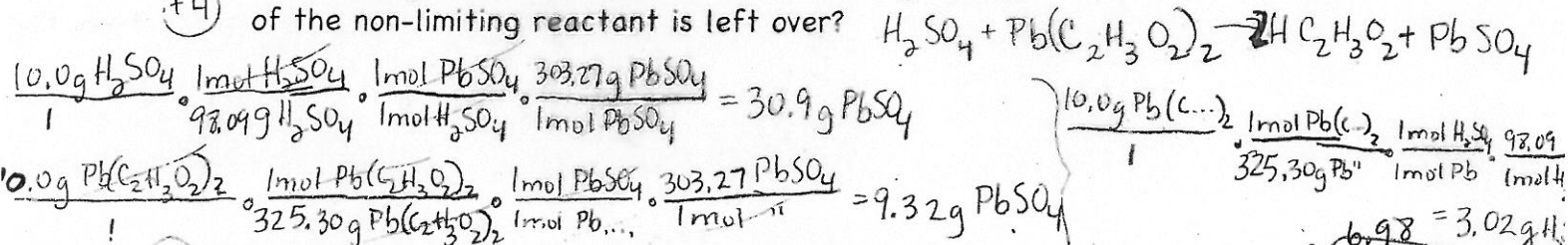
- (+4) 3. If an acetylene torch, used in welding, burns 1.36L of acetylene gas (C_2H_2), what volume of CO_2 is produced?



- (+4) 4. If you mix 3.50g of aqueous sodium phosphate with 6.40g of aqueous barium nitrate, what is the limiting reactant?

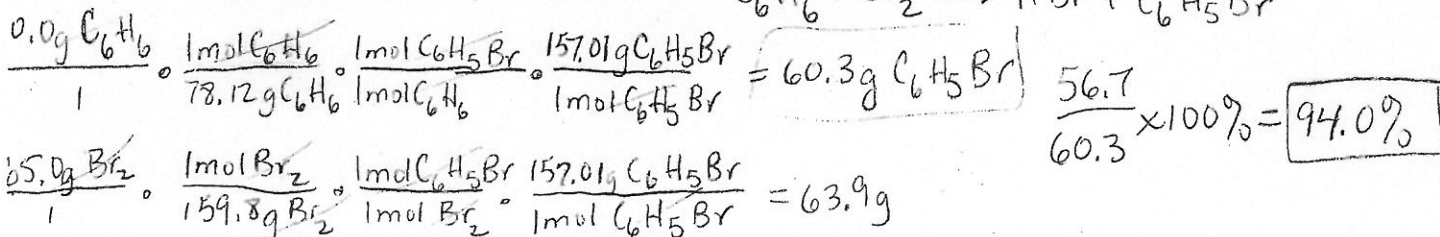
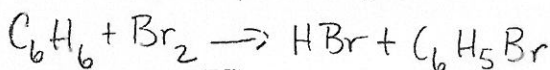


- (+4) 5. When 10.0g of sulfuric acid reacts with 10.0g of lead II acetate, how much of the non-limiting reactant is left over?



- (+4) 6. A chemist produces 56.7g of bromobenzene, $\text{C}_6\text{H}_5\text{Br}$, by mixing 30.0g of benzene, C_6H_6 , with 65.0g of bromine. What is the percent yield?

Hydrobromic acid is also produced.



7. 22.4 L of gas equals one mole of any gas at what temp and pressure?

At STP, which is 0°C + 1 atm.

8. Avogadro's number represents what?

The number of particles in 1 mole of a substance.

9. Coefficients in a balanced equation can represent what two things?

Moles or Liters (Volume)

10. The three types of problems that we studied are mass to mass, and what others?

mass to volume

volume to volume

11. Name at least two factors that cause the actual yield to be smaller than the theoretical yield.

- Not all the billions of reactant particles actually reacted
- Inevitably you will lose some of the reactant or product.