Blitz, Units 18-23, Form I-L

Name _____ **Period** ____

This is a Take Home Exam. **You may use your Notes, PowerPoint, or Text on this exam but NO help from human beings!**

You MUST <u>HAND WRITE</u> THIS EXAM!! NO TYPED PAPERS WILL BE ACCEPTED!

EXPLAIN IN COMPLETE SENTENCES AND GIVE EXAMPLES

1. Correct to STP (watch your temperature units!)-- 25.7 liters of CH_4 gas at 39.2^oK and 156 KPa.

2. Explain these: Solute, solvent, solution, saturated, unstaturated, supersaturated, colloid, tyndall effect.

3. Explain TWO principles that enable us to boil water in a paper cup.

4. Balance the equation for the burning of C_4H_{10} and write the big K for it.

5. Discuss THREE factors determining the rate of a chemical reaction.

6. Explain the Entropy of dissolving gases into liquids. Give an example from real life.

7. Using $PV = nRT$, solve for the volume in L when the pressure is 152.5 KPa, the temperature is 16^oC, and the number of moles is 2.13. (Watch temp. units!).
$R = 8.31$ $L^.KPa/mol^{.o}K$

8. Write the net ionic equation for the Precipitation of $Sb(OH)_3$.

9. Using graphs and WORDS, Explain the activation energies of endothermic, exothermic, and catalytic reactions.

10. Explain {Spontaneous Combustion} .....Aaaaaaaaagh..

When finished, please STAPLE this exam onto your papers and turn in on due date.