Unit 18-23 1/31/08 2:50 PM

Blitz, Units 18-23, Form T-Z

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 HAND WRITE THIS EXAM!! NO TYPED PAPERS WILL BE ACCEPTED!

EXPLAIN IN COMPLETE SENTENCES AND GIVE EXAMPLES:

- 1. Find the Pressure in KPa of 42.3 L of H_2 gas when 2.05 moles of it are at 15.2 °C, PV = nRT, $R = 8.31 \text{ L} \cdot \text{KPa/mol} \cdot ^{\text{o}}\text{K}$
- 2. State Charle's Law and give an example of it in action.
- 3. Discuss the entropy of **solids** and of **gases** dissolving in liquids and give examples.
- 4. Using activation energy graphs, EXPLAIN exothermic, endothermic, and catalytic reactions.
- 5. Corrects 45.2 liters of C₂H₆ gas at 28°C and 98.2 KPa to STP. (watch your temperature units!)
- 6. Explain the differences between suspensions, solutions, and colloids.
- 7. Write the net ionic equation for the precipitation of $Ba_3(PO_4)_2$.
- 8. Discuss the collision theory of reactions, and tell what two factors the activation energy must overcome.
- 9. Write the balanced equation for the burning of C₃H₈ and write the big K for it.
- 10. Explain the Cartesian Diver in terms of Pascal's Law, Boyle's Law, and Archimede's Principle.

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