

## Blitz, Units 18-23, Form D-H

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  $15.2^\circ C$ .  $PV = nRT$ ,  $R = 8.31 \text{ L}\cdot\text{KPa}/\text{mol}\cdot^\circ\text{K}$
2. State Charles' 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  $C_2H_6$  gas at  $28^\circ C$  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  $C_3H_8$  and write the big K for it.
10. Explain the Cartesian Diver in terms of Pascal's Law, Boyle's Law, and Archimedes' Principle.

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