

## Blitz, Unit 17, Form M-R

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. Define *sublimation* and give two examples.
2. DEFINE *vapor pressure* and *boiling point* and give TWO examples.
3. Describe **ten** of the fifteen *shocks* of Vapor Pressure and Boiling Point and explain them.
4. EXPLAIN how "Duckie" works (TWO principles).
5. DESCRIBE a way to demonstrate that fog, clouds, and "steam" are liquid droplets and not water vapor.
6. TELL how THREE FACTORS will shift the equilibrium.
7. Find the total number of calories needed to change 34.0 g of ice at  $-26.1^{\circ}\text{C}$  to steam at  $345.0^{\circ}\text{C}$ . Show all FIVE steps. The heats are:  $c$  for ice is  $0.5 \text{ cal/g}\cdot\text{C}^{\circ}$ ,  $H_f$  for ice is  $80 \text{ cal/g}$ ,  $c$  for water is  $1 \text{ cal/g}\cdot\text{C}^{\circ}$ ,  $H_v$  for water is  $538 \text{ cal/g}$ ,  $H_v$  for water vapor is  $0.5 \text{ cal/g}\cdot\text{C}^{\circ}$ .
8. USE an EQUATION to show that boiling is a cooling process.
9. EXPLAIN *regelation* of ice and TWO of its uses.
10. State the *Principle of le Chatelier* and give two examples of each.

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