

## Blitz, Unit 17, Form A-C

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. EXPLAIN *equilibrium* and its TWO conditions and give an example.
2. TELL how THREE FACTORS will shift the equilibrium.
3. DEFINE *vapor pressure* and *boiling point* and give TWO examples.
4. Find the total number of calories needed to change 12.0 g of ice at  $-22.3^{\circ}\text{C}$  to steam at  $252.0^{\circ}\text{C}$ . 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  $0.5 \text{ cal/g}\cdot\text{C}^{\circ}$ .
5. DISCUSS TWO ways to boil a liquid and give an example of each.
6. Using an EQUATION, show that boiling is a cooling process. Explain.
7. EXPLAIN how “Duckie” works (TWO principles).
8. EXPLAIN *regelation* of ice and TWO of its uses.
9. DESCRIBE a way to demonstrate that fog, clouds, and “steam” are liquid droplets and not water vapor.
10. Describe **ten** of the fifteen *shocks* of Vapor Pressure and Boiling Point and explain them.

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