

Blitz, Unit 17, Form S

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. USE an EQUATION to show that boiling is a cooling process.
2. EXPLAIN how "Duckie" works (TWO principles).
3. EXPLAIN *regelation* of ice and TWO of its uses.
4. DESCRIBE a way to demonstrate that fog, clouds, and "steam" are liquid droplets and not water vapor.
5. State the *Principle of le Chatelier* and give two examples.
6. EXPLAIN *equilibrium* and its TWO conditions and give an example.
7. Describe **ten** of the fifteen *shocks* of Vapor Pressure and Boiling Point and explain them.
8. DEFINE *vapor pressure* and *boiling point* and give TWO examples.
9. Find the total number of calories needed to change 44.0 g of ice at -29.3°C to steam at 452.0°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 cal/g , c for water is $1 \text{ cal/g}\cdot\text{C}^{\circ}$, H_v for water is 538 cal/g , H_v for water vapor is $0.5 \text{ cal/g}\cdot\text{C}^{\circ}$.
10. DISCUSS TWO ways to boil a liquid and give an example of each.

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