

QUESTIONS TO HAND IN – EXPERIMENT 17

NAME _____

LAB INSTRUCTOR _____ LAB DAY/TIME _____

1. What are the SI units of the latent heat?
2. The boiling point of water at atmospheric pressure is $100\text{ }^{\circ}\text{C}$. If you put some water in a pan at room temperature, and start adding heat at a constant rate, describe what happens to the temperature as the water absorbs heat at room temperature, starts to boil, and then completely boils away.
3. A pot of water with a mass of 1 kg is heated to the boiling point. How much heat is required to boil it all away?
4. On the atomic level, what does the latent heat energy do if it doesn't change the temperature?
5. What is the reverse process to evaporation? Give an everyday example of the extraction of latent heat as this process occurs.