



# Heat of Vaporization

## Guide Questions

**40% of the Written Report (Group Report) grade**

1. If a mass of boiling hot water equal to the mass of the steam were poured into your calorimeter of cold water, by how much would the temperature increased?
2. Which do you think will produce the most severe burn on the hand, 10 grams of steam at  $100^{\circ}\text{C}$  or 10 grams of water at  $100^{\circ}\text{C}$ ? Explain.
3. When water in the vapor state condenses, is the surrounding air warmed or cooled? Explain.
4. What do you think are the chief sources of error in this experiment?
5. Differentiate heat of vaporization from heat of condensation.