Chapter 10 Problem II Name _____

9. Use kinetic theory to explain the differences between the particles in a gas and those in a liquid.

10. Use kinetic theory to explain the difference between evaporation and boiling of a liquid.

11. Use Figure 10.11 to determine the boiling point of each liquid:
    a. ethanoic acid at 200 mm Hg BP = _____
    b. chloroform at 600 mm Hg BP = _____
    c. ethanol at 400 mm Hg BP = _____

12. Explain why the boiling point of a liquid varies with atmospheric pressure.

13. Why does evaporation lower the temperature of a liquid?

32. Explain why liquids and gases differ
    a. in physical state.

    b. in compressibility.

35. Explain why increasing the temperature of a liquid increases its rate of evaporation.

38. Distinguish between the boiling point and the normal boiling point of a liquid.

39. Use the graph (pg. 289) to answer each question:
    a. What is the vapor pressure of water at 40° C? _____

    b. At what temperature is the vapor pressure of water 600 mm Hg? _____

    c. What is the significance of the vapor pressure of water at 100° C?