

Name _____

Period _____ Date _____

Thermochemistry Problems

I. Phase Changes:

1. How much heat is needed to melt 58.2 g of ice at 0.00°C?
2. How much heat is released as 95 g of water vapor condenses at 100.°C?
3. If 125 g of water is frozen at its freezing point, what quantity of heat is released?
4. How much heat is needed to vaporize 75 g of water at 100.°C?

II. Temperature and Phase Changes:

1. How much heat is needed to change 25g of ice at 0°C to water at 25°C?
2. How much heat is needed to change 55g of water at 25°C to vapor at 110°C?
3. How much heat is needed to change 100. g of ice at 25°C to vapor at 130°C?
4. How much heat is needed to change 100.g of water at -10°C to vapor at 115 °C?