

Chapter 11-3: Heat In Changes of State

- STUDENTS: Please copy table 11.5 from page 308 here. Without the table you will receive no credit for this assignment.
- Heating Curves

- Heats of Fusion and Solidification

- Heats of Vaporization and Condensation

- Heats of Solution

- Example Problems:
 - How many kiloJoules of heat are required to melt 11g of ice?
 - How many kiloJoules of heat are absorbed when 5.0 g of ethanol evaporate?
 - How many grams of ice can be melted by the addition of 11 kJ of heat?
 - How much heat is absorbed when 55 mL of water are converted into steam at 100°C?
 - How much heat is released when 2.2 moles of NaOH(s) are dissolved in water? (The heat of solution is -445.1 kJ/mol)
 - How much heat is required to raise the temperature of 5.5g of water from 70°C to 110°C?

- How much heat is required to raise the temperature of 6.6g of ice from -20°C to 20°C ?

Homework: Section 11-3 (p308) #20-21

(p311) #22-23

(p313) #24-29