Name: **Period:** **Seat#:**

Try these problems. If you can DO them, check the box (☑). If you CANNOT do them, write some notes TO YOURSELF about what you need to study to succeed at these problems.

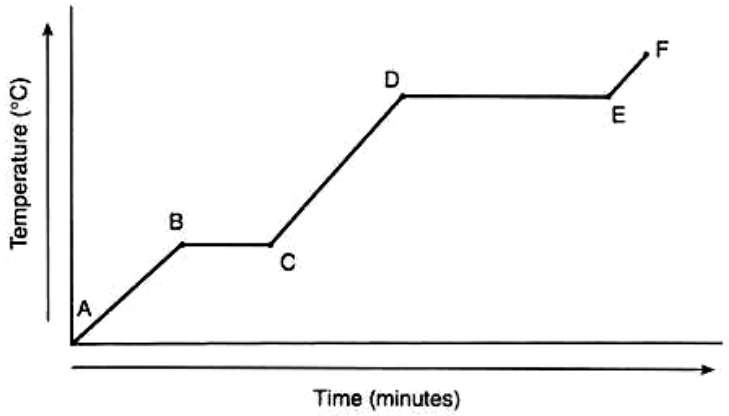
The specific heat of water is 4.18 J/g·°C. ***The molar mass of C_3H_8 = 44.09 g/mol.***

☐ **Calculating Enthalpy (ΔH) from Data:**

A 3.00 gram sample of propane, C_3H_8, is burned and warms 100. g of water from 20.0°C to 100.0°C. What is the ΔH of combustion for C_3H_8? _____ What is the sign of the ΔH? ____

☐ **Heating Curves**

Consider the following heating curve of ice at -30 °C to steam at 130 °C.



a) Label the graph with "solid", "liquid", and "gas"

b) In which segment is ***boiling of the water*** occurring? _____ (AB, BC, etc.)

c) Where on this curve would you use the formula, q = mCΔT? _____

d) Describe what is happening to the H_2O as you move from point B to point D.

_____

e) ΔH_{fus} would be used as the H_2O goes from Point ___ to Point ___

Struggled? Got some wrong? Do some self-study on the back of this page!