

"TRY YOURSELF" PROBLEM FROM STUDY SECTION 5.3

Try Yourself 5.3

Calculate the total quantity of heat energy (in joule and in kilojoule) that is required to melt 50 g of ice and then transform **all** the formed water to steam at 100 °C. (C for water = 4.184 J/g·K; heat of fusion of ice is 333 J/g, and the heat of vaporization for water at 100 °C is 2256 J/g.) Assume a closed system where no heat is lost or gained to the rest of the surroundings.